

Modern packaging



Nominated for *Packaging's Hall of Fame*® Story on Page 102

September 1953

ADHESIVE HELPS!

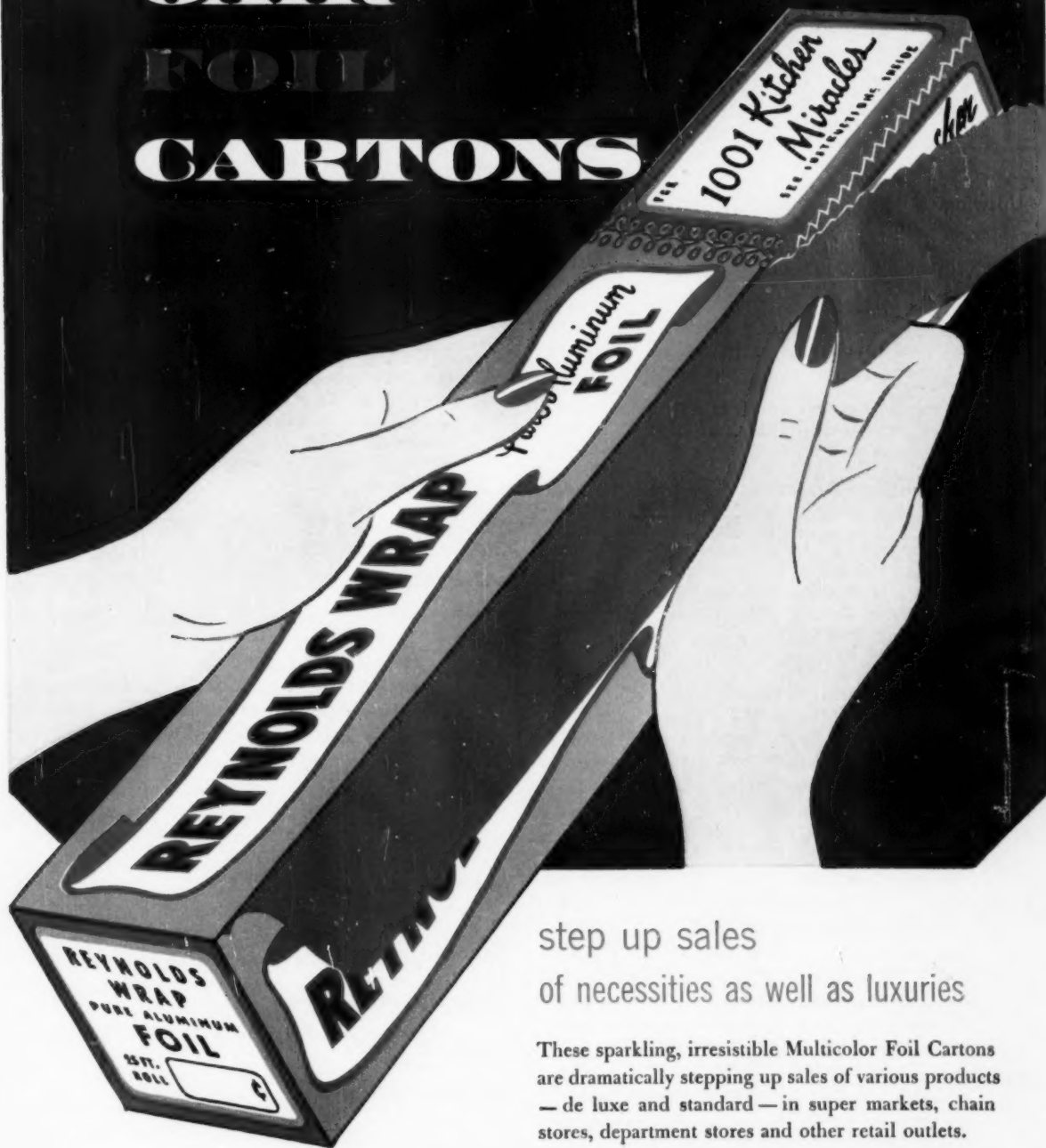
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is Ready*

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and USE

National
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step up sales
of necessities as well as luxuries

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Gair-Reynolds Foil Cartons are now style leaders in folding cartons.

Write for brochure on Gair Cartons



GAIR

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ROBERT GAIR COMPANY, INC. • 155 EAST 44TH STREET • NEW YORK • TORONTO
SEPTEMBER 1953

Modern packaging

Vol. 27 No. 1 September 1953

Upswing in unit packaging	89	Canned whole milk	128
Consumer acceptance plus new machines, new materials and new techniques are spreading the unit-of-use idea far and wide.		'Fresh' for months without refrigeration, it may have a considerable impact on marketing in the milk industry.	
New life for pretzels	95	New dimensions for cosmetics	132
Halter's uses brilliantly printed cellophane overwraps and bags to spark sales upturn.		Two leaders venture into the realm of abstract design; others show modern simplicity, trend to open display.	
Pinching bag	96	30 toys under one name	135
Slight heat-sealed constriction in polyethylene-film tube holds stack as cups are withdrawn one at a time.		Family design builds long-range brand identity and sales for Right-Time Toys.	
Packaging Institute Forum set	99	Display Gallery	136
Three-day program for 15th annual conference in New York Oct. 12-14.		Revlon's glamour bath-tub display . . . motion display shows stretch of flexible socks . . . Stopette display capitalizes on its selection for <i>Hall of Fame</i> series . . . lotion displays for three markets.	
Packaged shoe shine	100	Foil-wrapped ice cream	138
The Glass Wax people have done it with non-woven fabric, polyethylene film and polish in a gelatin capsule.		Aluminum packaging has reflective insulation, display appeal and convenience.	
Shulton Old Spice for Men	102	Technical	
This nominee to <i>Packaging's Hall of Fame</i> , whose Americana motif helped turn all cosmetic packaging into fresh channels of artistic appeal, rose overnight on its packaging to become the leader in its field.		Antioxidants for food papers	141
Salad by machine	108	Butylated hydroxyanisole shows unusual effectiveness as inhibitor of rancidity in fats and fatty foods. By R. W. BENTZ.	
Increasing popularity of pre-packaged delicatessen items leads National Tea to an automatic filler and lidder.		Water-barrier materials	144
Design Histories	110	Basic considerations in the choice of waterproof papers for case liners and barriers. By M. L. Downs.	
Personalized champagne labels . . . pocket mint dispenser . . . Can Can design for gift container . . . other outstanding packages.		Questions and Answers	148
Progress in squeeze-bottle filling	114	Departments	
On the more-advanced lines today only one troublesome hand operation remains.		Equipment and materials	150
Packaging Pageant	120	Plants and people	160
Eversharp cartridge refills in blister display package . . . 30 lbs. of potatoes shipped and stored in special paper bag.		For your information	178
Giant 'tube' for oil	124	U. S. patents digest	188
British extrude aluminum to 3½-in.-diameter quart size; it's made like a tube, looks like a bag, acts like a can.		Manufacturers' literature	193
		Index to advertisers	224

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cartons**

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JARS
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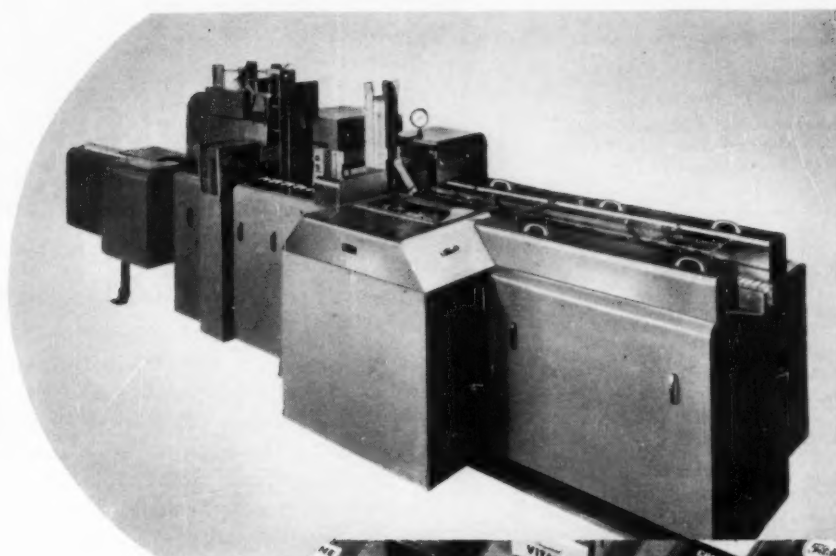
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can make important savings with a Type
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MODERN PACKAGING is regularly
indexed in *Industrial Arts Index*.



Not too far, not too fast

NO FILM IN HISTORY, as the National Flexible Packaging Assn. points out, has gone so far so fast as polyethylene. Less than nine years after its commercial introduction in America, there are no less than 34 polyethylene film producers and production for 1953 is estimated at 42 million pounds, the equivalent of about a billion square yards of 1½-mil packaging film.

This is a young and lusty industry within the packaging field. Despite periodic shortages, competition has been intense and the temptations toward debasement and gauge-squeezing to beat a price have undoubtedly been strong.

It is heartening, therefore, to find the cooler heads in this industry calling for a voluntary movement toward standardization and quality control. Preliminary work toward this end has been under way for several months.

Admittedly, polyethylene under economical, high-speed extrusion is a difficult film to control. But is there really any justification for the half-mil "tolerance" which is now the standard practice in the industry? With what is called 1½-mil packaging film, the weight can vary all the way from 1 mil to 2 mils. Although he is asked to judge competitive price quotations on an equivalent basis, any packager knows that there is a whale of a difference in performance between 1-mil and 2-mil polyethylene.

The National Flexible Packaging Assn. is pressing the movement toward more definitive standards and it is stoutly supported by leading extruders such as the Chester Packaging Products Corp., which has (1) come out for a merchandising program similar to that adopted by the cellophane industry some years ago, agreeing, on the basis of research, on a specific recommendation for each end product by type and weight and (2) suggested a series of charts by which the packager can very simply check the delivered weight of his film, as so many bags per pound.

"It is quite certain," says Chester, "that every reputable extrusion company can deliver film wherein yield can be controlled to plus or minus 5%." If gauge tolerance could be reduced to the same limit—the same standard that has stabilized the cellophane industry—the beginning of standardization could take place immediately. Tomorrow might be too late.

The Editors

MODERN PACKAGING



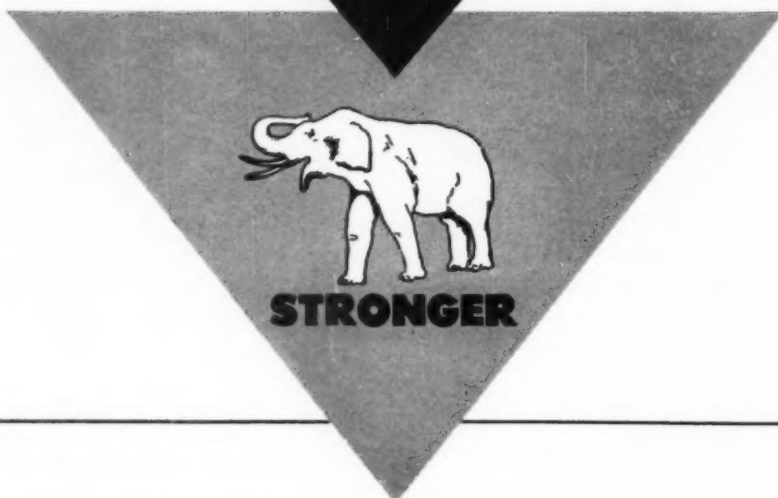
Three
ways to
stop a
customer



No need for bear traps or traffic cops to stop customers. Cooper's, Inc., is setting a new merchandising pace in department stores across the land—with this brightly printed cellophane Jockey underwear wrap by Dobeckmun. Better packaging ideas mean bigger sales for Cooper's and hundreds of our customers. They could mean bigger sales for you too. Call on us. We are ready and eager to serve you.

The Dobeckmun Company, Cleveland 1, Ohio • Berkeley 2, California • Bennington, Vermont

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Modern high speed packaging machinery puts adhesives to a tough test. Manhattan Packaging Adhesives come through time after time . . . because Manhattan research laboratories are always at work developing packaging adhesives that combine instant adhesion with maximum strength and endurance.

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Lion Brand Adhesives

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Another new development using

B. F. Goodrich Chemical *raw materials*



*Drum lined with Geon-based plastisol—
used for shipping acid.*

Unbeatable Drum for Acid

... can be used again and again!

THE plastisol lining in the drum pictured is a lifesaver for the drum—and a cost-saver for the shipper! The plastisol is made with Geon paste resin. It protects the metal against corrosion by sulfuric acid, ferric sulfate, sodium hypochlorite and other acids and corrosive chemicals. It permits use of ordinary metal drums, instead of breakable containers. And these plastisol-lined drums can be used over and over. Some have been on the job for three years! You can

see how this Geon-based plastisol cuts costs.

Perhaps a plastisol like this can help you improve or develop products to make savings—to bring in more sales. For Geon-based plastisols can be used to coat, cast, mold or dip. They resist heat and cold, oils, greases, aging, abrasion and many chemicals. They require no expensive mixing equipment, no solvents, no recovery systems. For helpful, technical information on their uses, or on your spe-

cific requirement, please write Dept. GL-9, B. F. Goodrich Chemical Company, Rose Building, Cleveland 15, Ohio. Cable address: Goodchemco. In Canada: Kitchener, Ontario.



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SEPTEMBER 1953

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by **Riegel**



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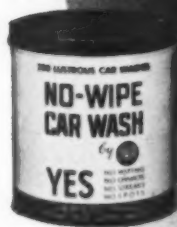
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**YOUR
LITHOGRAPHED
CAN IS YOUR
MOST IMPORTANT
SALESMAN**

**\$ SALES \$ SALES \$ SALES \$
\$ SALES \$ SALES \$ SALES \$
\$ SALES \$ SALES \$ SALES \$**



NO MATTER how many men you travel—or how much advertising you do—that final sale must be clinched by the appearance of your package. Yet, too often, packaging fails to keep pace with modern times and competition. Heekin Lithographed Cans—for any and all products—faithfully reproduce your packaging design in true lasting colors. Heekin has the “know-how” after fifty-two years of metal packaging production . . . and we know something about package design. Whether you plan to buy cans now—or in the future—right now would be the time to get acquainted.

1901
52
Years of
Service
1953

HEEKIN
Lithographed **CANS**

THE HEEKIN CAN CO.,

PLANTS AT CINCINNATI & NORWOOD, OHIO; CHESTNUT HILL, TENNESSEE; SPRINGDALE, ARKANSAS





in this Tri-State Rigid Plastic Box

DEVOE & RAYNOLDS COMPANY INC., uses Tri-State Rigid Plastic Boxes to make an appropriately artistic package for their "Painting for Fun" oil color outfits. In its own crystal-clear plastic display case, contents are attractively displayed but never soiled. Packaging costs are down, too, because outside labeling is not needed and inserting of die-cut chip board to hold contents is simple and swift.

Amateur painters and hobbyists appreciate the light weight and durability of these boxes. The plastic lid makes an excellent palette, and when empty, the box becomes a handy container for brushes, crayons, etc.

If your product needs the package that will spark its appearance . . . keep it clean . . . simplify packaging operations, call Tri-State and inspect the *world's largest assortment of rigid plastic boxes.*

DEVOE & RAYNOLDS PAINTS A PORTRAIT OF GOOD PACKAGING IN OUR STOCK BOX NO. 82 (6 $\frac{7}{8}$ " x 3 $\frac{1}{8}$ " x 1 $\frac{1}{8}$ "). FROM OUR STOCK SHAPES AND SIZES, OR MOLDED TO YOUR SPECIFICATIONS, THERE'S A TRI-STATE RIGID PLASTIC BOX TO FIT YOUR PRODUCT, BUILD YOUR SALES AND SIMPLIFY YOUR PACKAGING OPERATIONS.



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 SEPTEMBER 1953

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on the Packaging Horizon...

THE REYNOLDS WRAP PACKAGING SEAL

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Now make your Foil Package boost Sales still higher! Do it by making every shopper recognize your package *instantly* as aluminum foil... with *instant* knowledge of the superior quality foil guarantees.

New Way to this Extra Sales Power! Women know aluminum foil best as Reynolds Wrap.



Reynolds Wrap has taught them *personally* the superior protection of foil. Identify your package as "Reynolds Wrap packaging" and you add *conviction of quality* to eye-appeal... extra Sales Power!

The REYNOLDS WRAP PACKAGING SEAL... a million-dollar salesman, *FREE!* Powerfully promoted, this Seal is backed by the millions put into Reynolds Wrap. Put it on your package. Tie it into your advertising. Call the nearest Reynolds Sales Office or write Reynolds Metals Company, General Sales Office, Louisville 1, Kentucky.



REYNOLDS

Reynolds will promote this seal in National Consumer



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winning TV show



"Mr. Peepers" ... 22 million viewers! Also



special promotions to the

trade. Take advantage of the name

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women know best as aluminum "packaging"...

to proclaim that your product



is protected and displayed by the finest packaging known!

**QUALITY
PROTECTED WITH
REYNOLDS WRAP
ALUMINUM
PACKAGING**



SEE "MR. PEEPER'S," starring Wally Cox,
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HOW TO KEEP YOUR PRODUCT IN "T.O.P." SHAPE



R.C.
Metal-End
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CONTAINERS



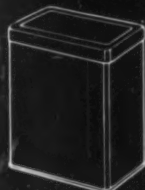
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Slip Top



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Round, square, oval, oblong—spiral or convolute—designed to your specific needs.



Absolute product protection is a "first" in R. C. packaging. Asphalt-impregnated and paraffin-lined containers are just two examples of R. C. Packaging.



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This combination envelope has a glassine back and a crystal-clear, acetate front that stays flat and resists age wrinkles and shrinkage. It says *more for the money* because its long life permits quantity purchases at economical prices.

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Canadian affiliate, Canadian Chemical Company, Ltd., Montreal and Toronto.

Celanese*

*Reg. U. S. Pat. Off.

PACKAGING FILMS

VISIT CELANESE BOOTH #11. 3rd Annual Conference & Exhibit Produce Prepackaging Association. The Chase Hotel, St. Louis, Missouri, October 5-8th.

Note how the mirrored inside lid
increases the display value of the package.
Camera is anchored with tripod screw
to die-cut slanted tray.



award winning package

If packages won "Oscars,"
this one created by Ritchie for
Argus Cameras, Inc. would run off with
all the 1953 honors.

The National Paper Box Manufacturers Association gave it three first awards—for ingenuity of construction, for display value, for and use performance—and the Grand Award for the best package in nation-wide competition. A total of four awards—every one of them justified by the outstanding merchandising contributions this package is making.

Why not do what so many of the country's
leading package goods manufacturers
have been doing for 87 years?
See Ritchie.



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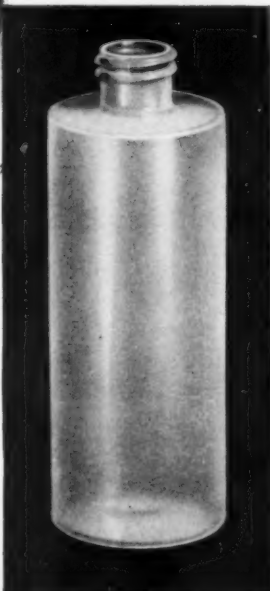
St. Louis
Cleveland
Seattle
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*switch to the packaging that has
changed the nation's buying habits!*

MILLS PLASTIC^{*}

BOTTLES



You can quickly see why MILLSPLASTIC bottles have hit the buying public with such habit-changing power.

Three words—lightweight, unbreakable, versatile—tell the story. They mean greater safety and usefulness for the consumer, reduced shipping, breakage and spoilage costs for the cosmetic, drug and chemical manufacturer. Industrial users find that aside from these general advantages MILLSPLASTIC bottles have properties which make them the best possible containers for acids and a variety of chemicals.

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We also custom design MILLSPLASTIC bottles in sizes, shapes and colors to meet your special needs. Atomizers, tubing and closures are available in standard styles or can be custom made.

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Your product may have a use that can blaze new trails of profit when packaged in MILLSPLASTIC bottles. Why not talk it over with us or our sales agents today. • T. M. REG.



Manufactured under patents 2,515,093—2,579,390—2,579,399. Other patents pending.

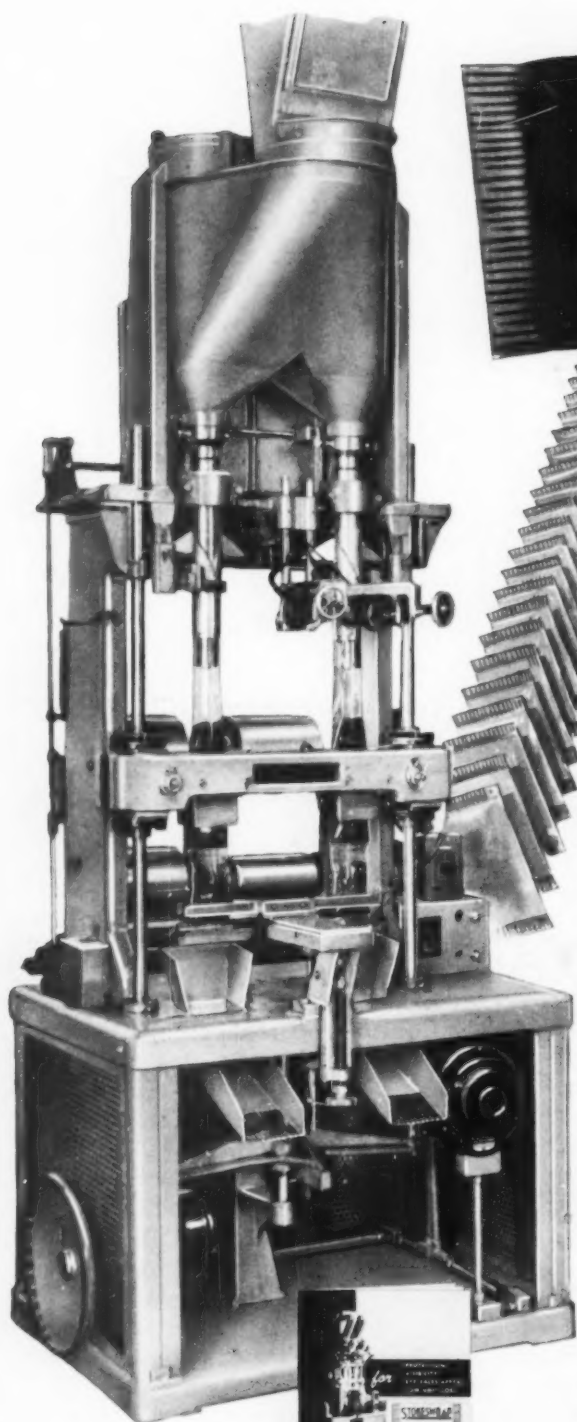
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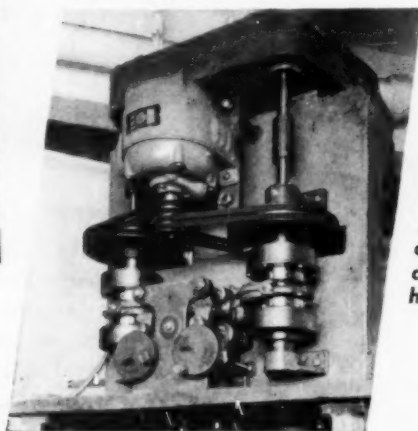
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MURray Hill 3-6027



OF COFFEE PER HOUR

For high speed precision filling of any size package up to 8 ounces, choose STOKESWRAP! Here is a Packaging Machine that holds costs down and keeps production profitable. In one efficient operation the STOKESWRAP automatically forms, fills and seals—delivering a neat, tight protective package. Cellophane, Pliofilm, polyethylene or any other approved heat sealing paper or foil may be used on the STOKESWRAP—plain or printed—single, double or laminated. Special attachment for gassing product is available. Auger or centrifugal feed.



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double clutch
drive with
independent
non-stop cam
control feed,
and separate
hoppers.*

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MILPRINT
ROTOGRAVURE
PRINTED CELLOPHANE

Melt Sales Resistance FAST



MILPRINT
PRINTED FOIL



MILPRINT
LUSTRO
PRINTED CELLOPHANE



MILPRINT
ROTOGRAVURE
PRINTED CELLOPHANE

WITH Milprint FROZEN FOODS PACKAGES!

Milprint packages meet customers with a warm welcome that thaws sales resistance in a hurry! It's the combination of eye-catching design, full-bodied color and brilliant precision printing that adds up to "pick-me-up" appeal—the friendly invitation to buy that boosts sales.

From stunning package design through seasoned printing craftsmanship, Milprint's scope of service provides sales-winning packages . . . backed by over 50 years of experienced leadership and the widest variety of packaging materials and printing processes available from any single source. Follow the lead of the leaders for best-selling packages! Call your Milprint man—*first!*

Milprint INC
PACKAGING MATERIALS
LITHOGRAPHY & PRINTING

General Offices, Milwaukee, Wisconsin
Sales Offices in Principal Cities

This insert printed by Milprint

Printed Cellophane, Pliofilm, Polyethylene, Acetate, Glassine, Foils, Folding Cartons, Bags, Lithographed Displays, Printed Promotional Material

NOBODY HAS AS MUCH EXPERIENCE AT MOLDING POLYETHYLENE AS

TUPPER!

The logical molder for you to consult regarding that product or package of yours which is to be made of polyethylene is Tupper. Tupper has done more than any other molder to make molded polyethylene a practical reality.

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Tupper's combination of experience, technical ingenuity, and the most modern equipment is at your service for the custom molding of your product in polyethylene. You can do no better than the best ...and the best at molding polyethylene is Tupper!

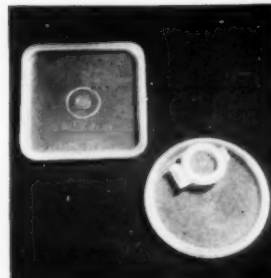
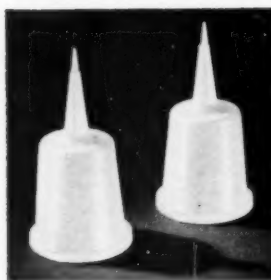
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TRADE MARK

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Showrooms: 225 Fifth Ave., N. Y. C.

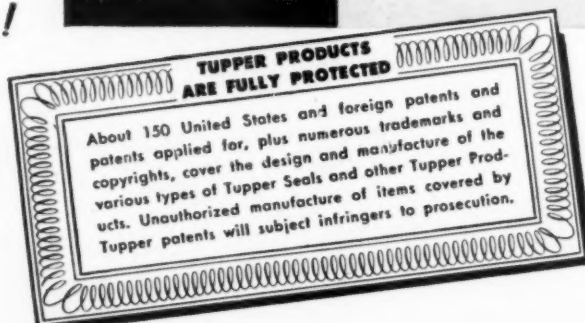
Address all communications to: Dept. MP-9



Tupper Seals are air and liquid-tight flexible covers. The famous Pour All and Por Top covers are designed for easy dispensing. They are made in sizes to fit all Tupperware containers.



When equipped with Tupper Seals, Tupper Canisters, Sauce Dishes, Wonder Bowls, Cereal Bowls and Funnels in various sizes are the most versatile reusable containers you have ever seen.



Satisfaction rests on the carton



The finer your product, the more it deserves a good shipping container.

Every week, thousands of dealers receive famous Oscar Mayer & Co. products in UNION Corrugated Containers.

Union board and boxes are among the strongest made. They give dependable protection.



UNION

BAG & PAPER CORPORATION

CORRUGATED CONTAINER DIVISION • Box Plants: Savannah, Ga., Trenton, N. J., Chicago, Ill.

Eastern Division Sales Offices: 1400 E. State St., Trenton 9, N. J. • Southern Division Sales Offices: P.O. Box 570, Savannah, Ga.
Western Division Sales Offices: 4545 West Palmer, Chicago 39, Ill. • Executive Offices: Woolworth Bldg., New York 7, N. Y.

Still Another Nationally Famous Product uses the...

Pres-O *Aerosol Valve*

Everywhere men with tough beards know Shulton Old Spice Smooth Shave as the way to ease and comfort in what used to be an arduous chore.

The Old Spice package, nominated for Packaging's Hall of Fame, is equipped with a Pres-O Valve—added protection for the quality of this famous brand.

Easy, Economical Filling

For greater accuracy and lower cost, this new Shulton package is loaded by means of propellant filling equipment designed and furnished exclusively by Oil Equipment Laboratories as a service to its customers.

We are proud to have been associated with the staff of Shulton, Inc. in the development of their new package, valve and filling equipment.

- Why not plan right now, to make free use of the engineering and designing experience that has made Pres-O preferred by leading manufacturers of pressurized products?



Wouldn't your pressurized product too, be better served with Pres-O, the valve that helps make repeat sales, because users find it "GREAT! — From every angle!"

OIL EQUIPMENT
Laboratories, Inc.

Bridge Street • Elizabeth, N. J.

Announcing

FIBREBOARD PRODUCTS (EASTERN DIVISION) INC.

Head Office: 56th St. & Paschall Ave., Philadelphia 43, Pa.

For many years Fibreboard Products Inc. has had two wholly-owned subsidiary plants in the East. Recently they were merged into a single subsidiary company under the name, "Fibreboard Products (Eastern Division) Inc."



PHILADELPHIA PLANT • 56th St. and Paschall Ave., Philadelphia 43, Pa. Our Philadelphia plant, formerly called the "Federal Container Company," was already a long-established company when it became a part of Fibreboard in 1928. This Division markets both cartons and containers.



BALTIMORE PLANT • 1511 N. Russell Street, Baltimore 30, Maryland. Also a long-established company when acquired by Fibreboard in 1936 to serve the Baltimore-Washington area, the Baltimore plant, too, sells a full line of converted paperboard products. It was, until the merger, known as "The Maryland Container Company."



**FIBREBOARD
PRODUCTS INC.**

Head Office: San Francisco 11, California

FIBREBOARD PRODUCTS (EASTERN DIVISION) INC.
Philadelphia and Baltimore

SALES OFFICES: (West) Boise • Denver • Fresno • Los Angeles • Oakland • Phoenix • Portland • Sacramento • Salem
Salt Lake City • San Diego • San Francisco • San Jose • Seattle • Stockton • Yakima; (East) Baltimore • Easton • Lancaster • New York • Philadelphia • Reading

Acme Steel Wire Stitching helps boost output

**Alka-Seltzer solves packet problem with
specially-designed Acme Steel stitching machine**



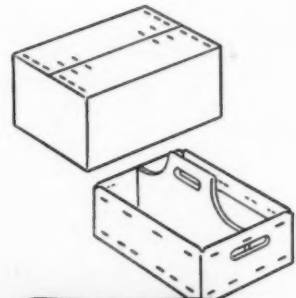
No headaches here with special four-headed Acme Steel Wire Stitchers stitching individually packaged Alka-Seltzer tablets to display cards for sale throughout the world.

Miles Laboratories, Inc., is increasing output of individually-wrapped Alka-Seltzer tablets . . . and Acme Steel field engineers helped make it possible.

Tablets are sealed air-tight in aluminum foil, and—when packet size was recently reduced to save on foil—there was danger that the stitching machines formerly used might puncture the air-tight compartments.

So Acme Steel engineers developed a four-headed wire stitcher that holds two Alka-Seltzer display cards at once, stitches 24 tablet packets in 3 rows to each card, does it so fast and well and safely that Miles Laboratories is replacing all old stitchers on this operation with the new Acme Steel model.

Whatever kind of carding, bagging or packaging problems you may have, chances are that Acme Steel Stitching Wire can help you. Call in your nearest Acme Steel field engineer. Or write to Acme Steel Products Division, Dept. MP-93, ACME STEEL COMPANY, 2840 Archer Ave., Chicago 8, Ill.



**ACME
STEEL**

STITCH IT...STRAP IT...SHIP IT...SAFELY!



VARIETY in size of bottles made from polyethylene is shown by comparison with girl.



COLOR in polyethylene bottles is not limited to size, whether two-gallon carboy or small cosmetic bottle.



CLOSURES molded of polyethylene are used with these polyethylene bottles for all-round safety in handling acids.



LIGHTNESS of huge 13-gallon carboy makes easy handling even for an eight-year-old. Polyethylene is lightest commercial plastic.



BRUISING TREADS of bulldozer did not crack or break polyethylene carboys in this test. All bottles resumed shape shortly after being freed. Such durability cuts breakage cost, improves safety. Illustrations are by Plax Corporation, West Hartford, Connecticut.

Lighter, safer, stronger carboys—made from tough, resilient plastic

Made from a plastic so light that it floats on water—BAKELITE Polyethylene—these big bottles mean easier handling, lower shipping costs.

Their new type of closure, also BAKELITE Polyethylene, needs no cap liner. It can be tightened by hand or with a wrench. Their new neck design simplifies pouring.

These carboys have remarkable flexibility and toughness. Practically unbreakable, they won't shatter or smash. If dropped when empty, they bounce. They're made from the same plastic used for "squeeze bottles."

Polyethylene is also noted for its chemical inertness. Containers made from it neither affect nor are affected by most chemical contents, acids, or alkalis. They can be colored for ready

identification. They can be formed in an endless variety of functional or decorative shapes.

BAKELITE Polyethylene has many features that make it a success in packaging jobs—as sheeting and film, as coatings for paper, foil, and cloth, or molded into containers, closures, and dispensing devices.

Why do we advertise a material that's in 'short supply'? Because we know that it takes time to perfect your packaging ideas . . . Because we have a material worthy of your consideration . . . tough, flexible, easily molded, resistant to chemicals, light in weight . . . Because, by the time you have completed your development work, substantial progress will have been made on an extensive plant expansion program.

BAKELITE
TRADE-MARK
Polyethylene

BAKELITE COMPANY

A Division of Union Carbide and Carbon Corporation **UCC** 30 East 42nd Street, New York 17
In Canada: Bakelite Company (Canada) Ltd., Belleville, Ont.



Textile and use—first award

Confection and use—first award

Best one-color printing—first award

Best two-color printing—first award

Best two-color printing—first award

Soap and use—first award

22 prize-winning



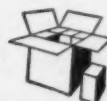
Carriers end use—second award

Best two-color printing—second award

Each year the competition sponsored by the Folding Paper Box Association of America brings together some of the nation's best "salesmen." These are the packages that play a large part in presenting, protecting and selling a wide variety of merchandise.

The 1953 contest drew a record-breaking 4516 entries, in competition for 143 prizes. And, of course, we are proud that the judges selected 22 Container Corporation cartons for important awards—six "firsts," two "seconds" and fourteen "honorable mentions" shown on these pages. These are tributes to the skill and resourcefulness of the company's Package Engineering, Design and Production Departments—assets that can be as increasingly important to you as they are to us.

Container Corporation of America





Soap end use—honorable mention

Best two-color printing—honorable mention

Best multi-color design—honorable mention

Food end use—honorable mention

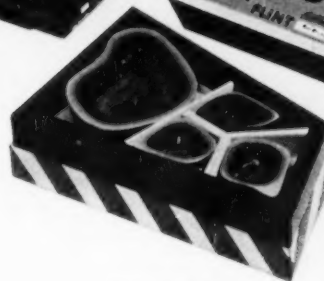
Best display container—honorable mention



Hardware end use—honorable mention



Hardware end use—
honorable mention



Hardware end use—honorable mention

salesmen!

Best multi-colored design—honorable mention

Best two-color printing—honorable mention

Best multi-colored design—honorable mention

Textile end use—honorable mention

Best multi-colored design—honorable mention—also textile end use—honorable mention





"22% More Sales From Well-Stocked Shelves"

(Progressive Grocer Survey)



... And when they're your products on those well-stocked shelves, packed in individual showcases by H-A, they're the ones that really move.

For efficient easy-to-handle H-A glass containers have the take-home appeal that means sales.



There's an H-A Cap for every Container . . . Protect and Sell.



*There's an H-A sales office
and an H-A factory near you*

**HAZEL-ATLAS GLASS
COMPANY** WHEELING,
WEST VIRGINIA

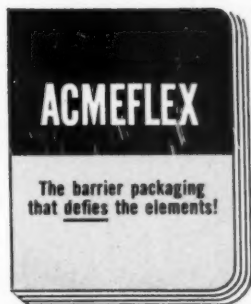


TIME STANDS STILL INSIDE YOUR PACKAGE...

Does every tick of the clock rob *your* product of a fractional share of its original perfection?

Such loss need not occur. Acmeflex—the new wonder packaging material — virtually makes time stand still inside your package. Delivers your product to its final destination in the same condition it left your hands days, weeks, months before.

Acmeflex is a unique barrier... provides the ultimate in protection... possesses the perfect degree of flexibility... can be engineered to your specific requirements. For high-speed automatic packaging, Acmeflex is unsurpassed.



Send for ACMEFLEX CATALOG containing representative samples of Acmeflex with specifications for packaging almost any product.

ACME PACKING CORPORATION
Meadow & Bogart Streets, Brooklyn 6, N. Y.

Schoettle Case Histories:



true story of a Purchasing Agent in a Lather

CASE HISTORY #39 The 200,000 folding paper boxes that this company* ordered were ready—and then the Purchasing Agent phoned. He was really in a lather! A raw material used in the manufacture of the product became suddenly unavailable and the boxes were useless. What could we do about it, he pleaded. We resold these boxes to another customer at no loss to the manufacturer for whom they were originally made. We work hard to get customers. We work hard to keep customers, that's why purchasing agents love us!

CASE HISTORY #62 A large electric supply company* required an original construction of a folding paper box in which to ship bolts, nuts and screws; and also provide a dispensing bin on the shelf. The purchasing agent worked himself into a lather trying to figure out a box that could do a "complete" job. Half a dozen manufacturers submitted "Goldbergs" that were totally impractical. Finally he did what he should have done immediately—call on Schoettle. In short order, Schoettle produced a box that was praised very highly and the Purchasing Agent relaxed and smiled again.

* Whether it's speed or ingenuity, depend on Schoettle to produce! We specialize in "unlathering" purchasing agents . . . we never let them down! For quality folding paper boxes—as you want them—when you want them, depend on Schoettle!

*name on request

EDWIN J. SCHOETTLE CO.

533 NORTH ELEVENTH STREET • PHILADELPHIA 23, PENNA.

Designers and Manufacturers of Paper Boxes with Buy Appeal

VISKON[®]

NONWOVEN FABRICS



- ① HEAT SEALABLE
- ② HIGH POROSITY
- ③ SOFT—FLEXIBLE
- ④ NON-TOXIC
- ⑤ CAN BE PRINTED
- ⑥ DURABLE
- ⑦ ECONOMICAL
- ⑧ WIDE VARIETY OF
SIZES—WEIGHTS—
COLORS
- ⑨ RESISTS DETERIORATION
- ⑩ LINT FREE—
WON'T UNRAVEL

MAIL
COUPON
TODAY

VISKON[®] nonwoven
fabric

... another product for modern industry by
THE VISKING CORPORATION

Wrap your product in VISKON— and forget your packaging problems!

Forget your packaging problems with VISKON. VISKON offers new and better ways to present your product to the consumer. Where you need porosity, absorption, diffusion, infusion, and high wet strength, you need VISKON.

VISKON is safe for food packaging. It is non-toxic, tasteless, odor-free, lintless, and completely sanitary.

VISKON nonwoven fabrics give you all the advantages of any ordinary packaging material. VISKON is soft and flexible, yet strong and durable. VISKON is heat-sealable, can be sewn and glued, and takes printing easily.

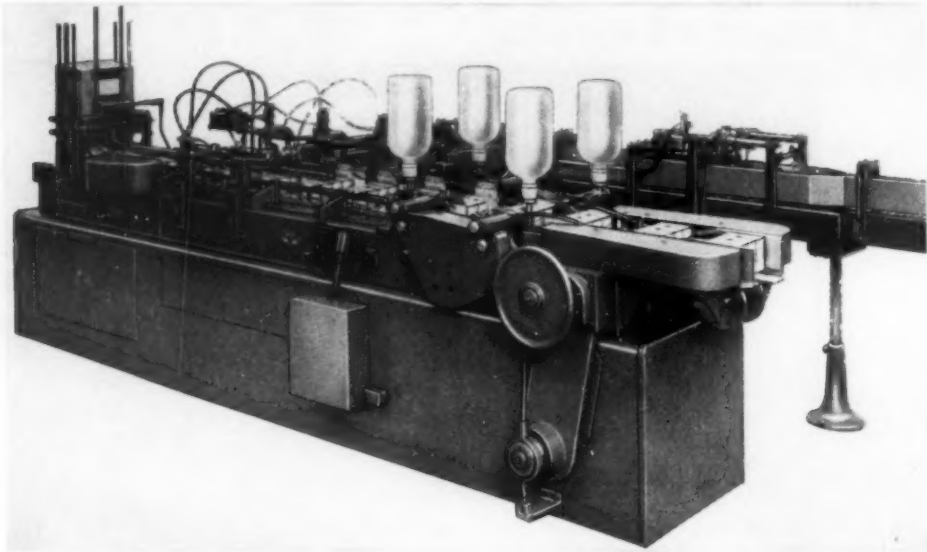
VISKON is available in mill rolls, tapes, or sheets. In a variety of weights and grades... either cotton or rayon fabric. For your food, or any other specialized packaging problem, VISKON will suit your needs... for VISKON covers the packaging field.

THE VISKING CORPORATION, Dept. MP-9
Box 72, North Little Rock, Arkansas

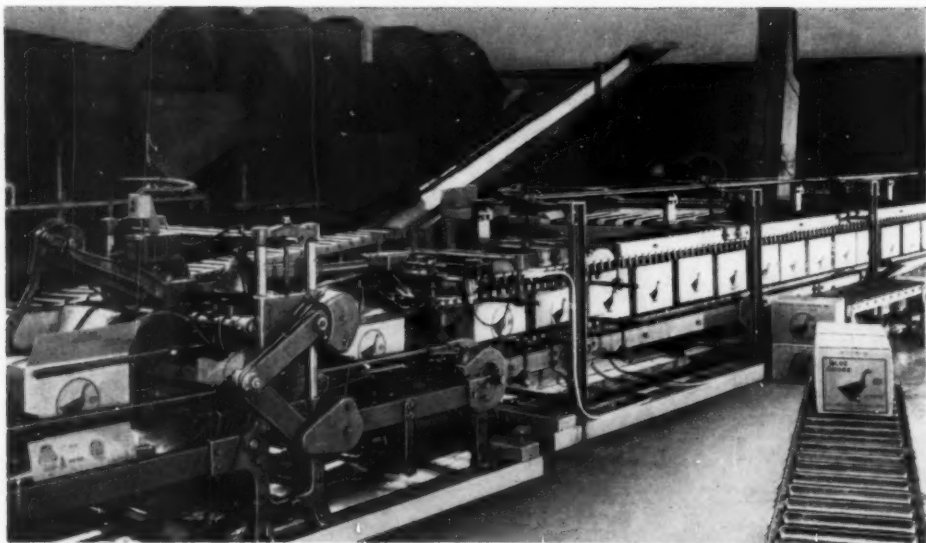
Please send more information about VISKON for use as a product container.

NAME _____
POSITION _____
COMPANY _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

500-CAN-PER-MINUTE LINE FOR PACKAGED BEER Equipment developed by Standard-Knapp is helping brewers set new records for speed and efficiency in packaging canned beer. Can Inserter (shown) and Compression Unit opens six-pack cartons, loads, glues and seals them. In continuous sequence, other S-K machines collect and pack cartons into master shipping cases and then glue and seal cases.



Two Major Packaging Advances



IMPROVED CITRUS FRUIT PACKAGING Economies resulting from the use of corrugated shipping cases for citrus fruits are realized through the use of Standard-Knapp Gluers and Sealers. Citrus packers relied upon Standard-Knapp's application engineering to supply adequate equipment.

Only the best is good enough

Here you have two instances where Standard-Knapp equipment and application engineering solved important packaging problems. In the brewing industry, the need was for higher speeds effective throughout a complete line. In the citrus industry, the need was for equipment to prepare the new type shipping case for transportation and marketing.

Standard-Knapp has the breadth

of experience to help you determine how and where to boost output, modernize or re-equip — the kind of experience that does not sell you a machine but an end result that pays off in lowered costs, increased productivity, reduced maintenance. As proven in the brewing, citrus and other industries,

**IT PAYS TO STANDARDIZE WITH
STANDARD-KNAPP EQUIPMENT**

FULFILLED WITH STANDARD-KNAPP AUTOMATIC PACKAGING EQUIPMENT

IT'S EASY TO BRING YOUR INFORMATION FILE ON
STANDARD-KNAPP UP-TO-DATE BY USING THIS COUPON

DEPT. G

STANDARD-KNAPP DIVISION OF EMHART MFG. CO.
PORTLAND, CONNECTICUT

Please send me information on equipment checked below:

- | | |
|---|---|
| <input type="checkbox"/> Bottle Packers | <input type="checkbox"/> Labelers |
| <input type="checkbox"/> Can Packers | <input type="checkbox"/> Gluers and Sealers |
| <input type="checkbox"/> Rinsers | <input type="checkbox"/> Six Can Cartoners |
| <input type="checkbox"/> Can Palletizers & De-Palletizers | |

NAME _____

TITLE _____

COMPANY _____

ADDRESS _____

STANDARD-KNAPP DIVISION OF EMHART MFG. CO. **PORTLAND, CONNECTICUT**

NOW FOR FLEXOGRAPHIC PRINTERS



GEMGLO *high-gloss*

• New IPI Gemglo inks set new standards of gloss and wet or dry rub-proofness • Excellent sparkle • Brilliant colors • High gloss • Print sharp, clean • 100% pigmented • Formulations for all types of stock—including foil, plastic films and glassine—often eliminates need for overprint varnish.

AQUALOX *water-base*

• New IPI Aqualox water-base inks are fast drying • Have good rub-resistance • Full color range • Excellent moisture-resistance • Print clean, sharp • Run exceptionally well on gluers, folders, etc. • Ideal for all normal paper box stocks • No fire hazard • No expense for reducer—use tap water • Greater uniformity with less attention needed due to excellent press stability.

Ask your IPI salesman for full information on the new IPI Gemglo and Aqualox inks for flexographic presses.

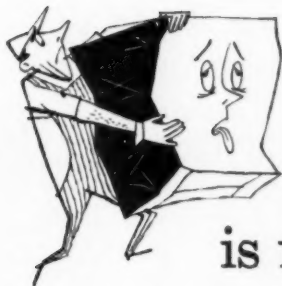
IPI IC, Anilox, Aqualox and Gemglo are trademarks of Interchemical Corporation



INTERCHEMICAL CORPORATION

PRINTING INK DIVISION • 67 West 44th Street, New York 36, New York

RELY ON IPI FOR LEADERSHIP IN INK RESEARCH



is rough handling beating the "SELL" out of your product?

If your package shows signs of travel fatigue by the time it gets to market, it's time to check up on the materials you're using for protective packaging.

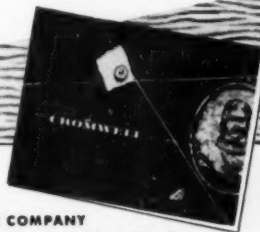
Cromwell's new flexible-laminated protective papers are good insurance that your package will land on the dealer's shelf with all the eye-appeal you've carefully engineered into it. These new papers have the rugged strength you'd expect only in a hard, flat sheet . . . yet they're flexible enough to conform perfectly to your package. They're waterproof, punc-

ture-resistant and tear-resistant.

Specify Cromwell papers wherever you need a conforming exterior protective wrapping . . . as liners for crates or cartons . . . or any other place where waterproofness, strength and flexibility are important.

The coupon is for your convenience in asking us for free samples and ideas you may be able to use in doing a better packaging job. **FLEX-FIBRE**, flexible, laminated-reinforced; **FLEX-LAM**, flexible, laminated only; **FIBRE-KRAFT**, laminated-reinforced.

Cromwell
PAPER COMPANY
4801 South Whipple Street
Chicago, Illinois



CROMWELL PAPER COMPANY
4801 South Whipple Street, Chicago, Illinois

Send me without obligation your new folder of laminated paper samples.

Name _____ Title _____

Firm _____

Type of Products _____

Address _____

City _____ Zone _____ State _____

CROWN

SPRA-TAINER® Does It Again!



"stop that smell!"

3-WAY AIR REFRESHER is a pressure product of Reefer-Galler, Inc., New York. This popular spray preparation serves every deodorizing need throughout the home, quickly conditioning the air by scientific triple action. 3-WAY AIR REFRESHER is packed in the "Modern Design" and seamless construction of the world's original and leading propulsion can: Crown SPRA-TAINER.

In addition to aerosols, Reefer-Galler also package an extensive line of solid and liquid products in other types of Crown Cans. All products are readily identified by a merchandisable "family design," perfectly reproduced by Crown's famous Lithography Service.

Whatever you need in the way of Cans or Service, a cordial welcome awaits you at Crown.



These are among other familiar Reefer-Galler Products in Crown Cans.



One of America's Largest Can Manufacturers

CROWN CAN

PHILADELPHIA

Division of

CROWN CORK & SEAL COMPANY

PHILADELPHIA, CHICAGO, ORLANDO, BALTIMORE, NEW YORK, BOSTON, ST. LOUIS



• EXERCISE YOUR ARTISTRY
WITH

ARTCOTE®

**PYROXYLIN METALLIC COATED
PAPERS AND BOARDS**

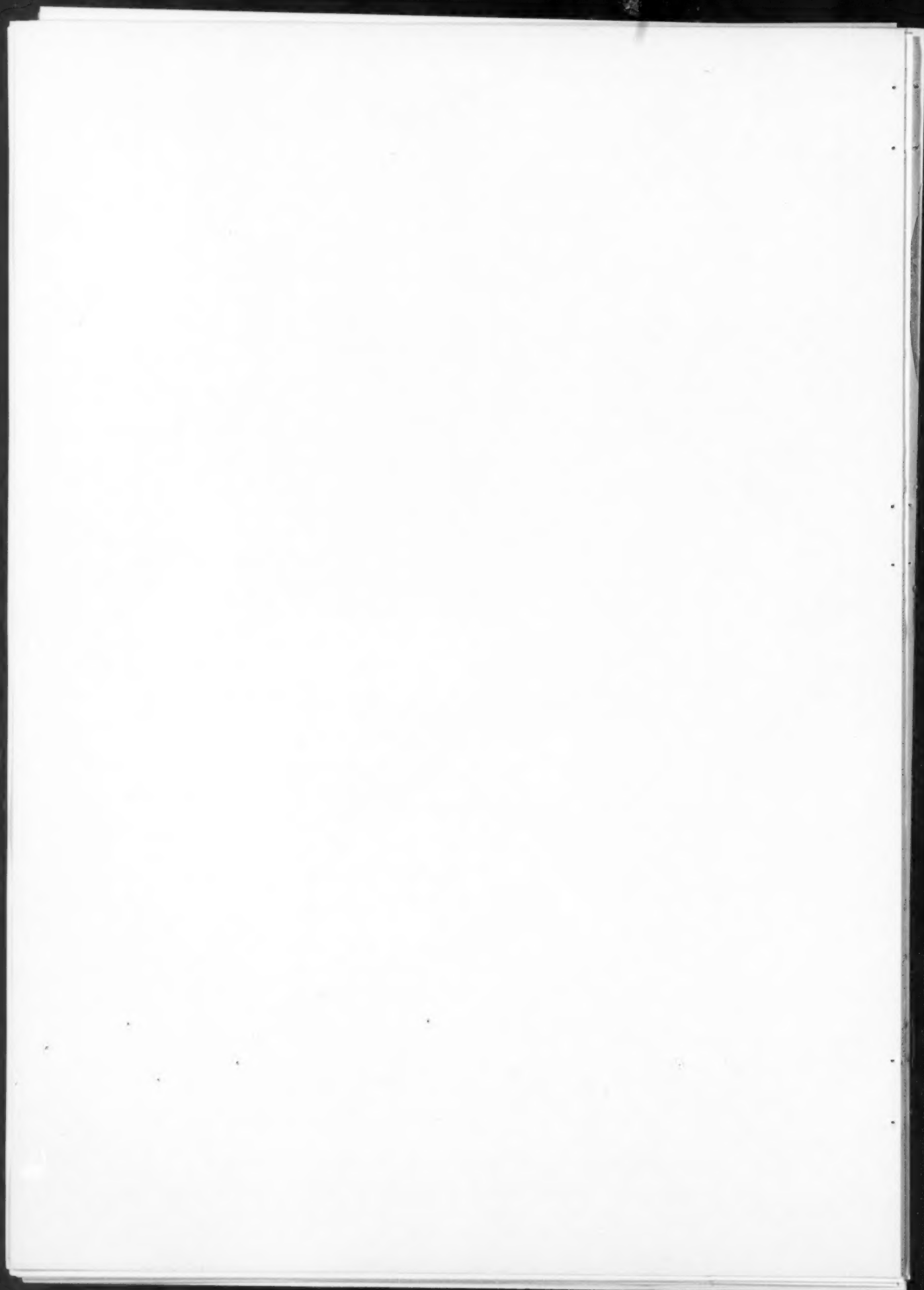
The soft sheen of Artcote Papers and Boards offers
your imagination unlimited scope in the design of
labels, set up boxes, folding cartons and other
packaging specialties. Their printing, embossing,
and coloring characteristics are unequalled.

Papers are 60g, gummed or plain; cover stocks are
7, 10, or 15 point.

GOLD • SILVER • COPPER • PASTELS

Available through your paper dealer or from

ARTCOTE PAPERS INC. Irvington, New Jersey



FIRST IN DEVELOPMENT



*The vision to conceive and the flexibility
to adopt tomorrow's ideas today.*



SEFTON FIBRE CAN CO.

St. Louis; New Orleans; Portland, Ore.; Piqua, O.



Leadership in Appearance Builds Leadership in Sales

**That's Why There is
No Substitute for...**

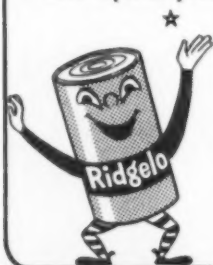


Custom Made

IS OUR 'POLY' SALESMAN

WORKING FOR YOU?

Reggie Ridgelo's POLYEON combines the outstanding properties of Polyethylene with selected packaging materials, to help you produce superior packaging for your customers.



★ ★ ★
Write today for your samples of POLYEON kraft, foil, cellophane, boxboard, tag and other sales-building combinations for protective packaging.

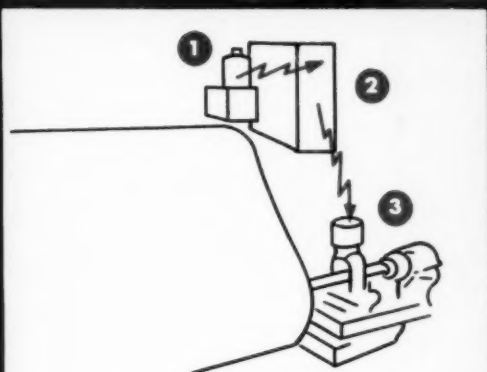
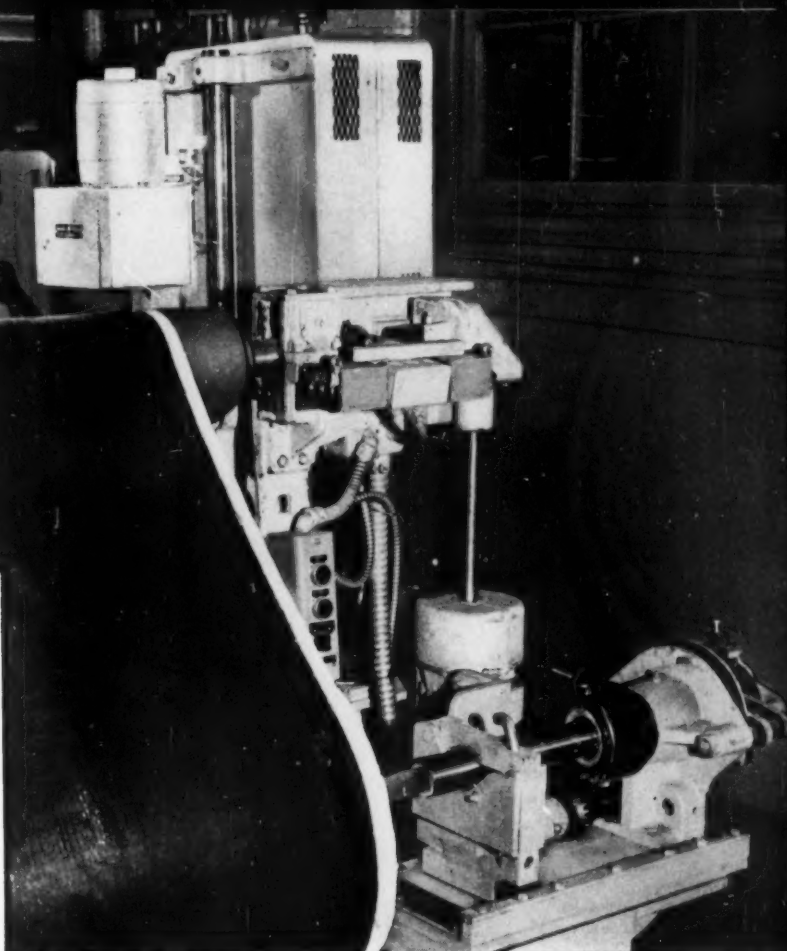
FIRST CHOICE OF LEADING MANUFACTURERS OF PHOTOGRAPHIC MATERIALS AND SUPPLIES

Suppliers to the field of photography deal in a somewhat unique combination of tangibles and intangibles. The quality of their products is not self evident... is determined only by use, and proper use. To instill consumer confidence, as well as to increase sales, leading photographic supply manufacturers have learned the high value of fine, clay-coated, *custom-made* boxboard. That's the kind made by Ridgelo — the *only* kind — and it's outstanding on every count: Brightness—smoothness—gloss—folding—uniformity. Ridgelo is available in a wide range of colors and finishes... *made to order for every order!*

MADE AT RIDGEFIELD, N. J. BY LOWE PAPER COMPANY

Representatives

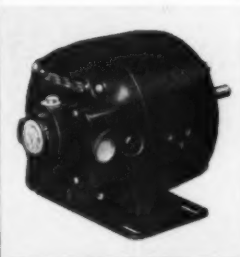
H. B. Royce, Detroit
Philip Rudolph & Son, Inc., Philadelphia
A. E. Kellogg, St. Louis
Norman A. Buist, Los Angeles



1 PHOTOELECTRIC SCANNER rapidly swings light beam across line or edge, generating electrical pulses. Time at which pulses occur indicates web position. If web moves, scanner instantly notifies . . .



2 CONTROL PANEL
After determining the direction in which a correction must be made to bring web back in register, the control panel amplifies the signal sent by the scanner. It then actuates...



3 CORRECTION MOTOR which repositions web until scanner receives correctly-timed pulses. At this point, web is again in register, and repositioning stops unless misregister reoccurs.

ON THIS SLITTER, PRECISION ACCURACY OF . . .

G-E Side Register Control Permits Higher Web Speeds

This G-E photoelectric side register control system is capable of handling run-out rates of 50 inches per minute at web speeds as high as 10,000 feet a minute! It can detect web side motion as little as 1/1000th of an inch!

Versatile G-E control can be applied to slitting, side trimming, re-winding, or printing operations. Photoelectric scanner operates from nearly any material by guiding either the edge of the web or a printed line, broken or continuous.

Completely automatic, this G-E system maintains register more economically and more efficiently than an operator. Photoelectric operation means few moving parts, long and dependable service. Its operation is simple, its maintenance requirements few—your plant electrician can perform routine service.

For more information, contact your nearby G-E Apparatus Sales Office or write for Bulletin GEA-5947, Section 785-6, General Electric Company, Schenectady 5, New York.

GENERAL  **ELECTRIC**



The ultimate of
quality,
care,
craftsmanship
...go into
Rowell Boxes

The creative art of the master pottery-maker
finds its counterpart in the exacting skill
Rowell devotes to making fine set-up boxes
... a skill known by packagers everywhere



E. N. Rowell Co. Inc.

Mfrs. Fine Paper Boxes
Batavia,
N. Y.



Which of these PACKAGING IDEAS will cut *your* costs?



- Six widths.
- Easily dispensed by "cut-off" type machines.

Send coupon with letterhead for facts and

Free samples

INDUSTRIAL PACKAGING PAPERS SINCE 1895



Stronger Wrap for Big Packs

Angier's new Glass-wrap is reinforced with strong glass fibres to give better protection at less cost. Waterproofed; flexible; up to 96" wide. Check below for FREE sample & facts.



Vapor-from-Paper STOPS RUST

Saves greasing. Saves degreasing. It's Angier's *proven* vapor rust preventive—VPI® Wrap. Easiest, *sure* way to store or ship your metal products. Check below for FREE sample & facts.

Center-seam Sealing with Angier Reinforced SNAKE TAPE

It's the *fast* way to seal cartons. Yet, that *one* strip along the center seam gives you a *stronger* closure! That's because Snake Tape is reinforced to give strap-like strength.

Center-seam sealing is accepted for parcel post, railway express, air express, and truck shipments; it also is accepted for carload and LCL rail shipments where rule 5, section 1 (c) of Uniform Classification applies. Check below for FREE sample & facts.

ANGIER CORPORATION
Framingham 11, Massachusetts

I want information and samples of:

- ☐ Angier's glass fibre-reinforced Glass-wrap.
- ☐ Angier's vapor rust preventive VPI Wrap.
- ☐ Angier's reinforced, water-proofed Snake Tape.

NAME
(Sign and attach coupon to letterhead)



From the Gardner Gallery of famous American Packages

Pride

... AND SOMETHING BIGGER!

When popular choice makes certain products nationally famous, the manufacturers of those products have a right to feel proud.

And when so many of those manufacturers turn to Gardner for the folding cartons in which to package their products, we can't help feeling a bit proud, ourselves. But it's a *challenging* sort of pride, not the "pat yourself on the back" kind.

Here at Gardner we believe in never being quite satisfied with a good job. We feel an obligation to ourselves—and to our customers—to do even better, tomorrow, what we have gained recognition for doing well, today.

We think that's an important reason why you'll find so many of America's most famous products packaged in Gardner cartons.

THE GARDNER BOARD AND CARTON CO.

Manufacturers of Folding Cartons and Boxboards

GENERAL OFFICES: Middletown, Ohio—PLANTS: Middletown, Ohio; Lockland (Cincinnati), Ohio
Sales Offices in Chicago, Cleveland, New York, Philadelphia, Pittsburgh, St. Louis





WHAT *Characteristics* **DO YOU WANT IN** *Your Packaging*

Decotone Products Division makes functional packaging materials specifically engineered to meet the individual requirements of the products they protect. These are produced as an integrated operation under a single responsibility, from the raw pulp at the parent mill to the finished materials on Decotone's shipping platform. They may be decorated by embossing or aniline or gravure printing from stock or special designs on Decotone's multi-color presses.

Let Decotone produce for you an attractive, efficient packaging material with the built-in characteristics called for by your product.

Consult Decotone without obligation on your paper and packaging problems. Our laboratories will gladly co-operate on research and development of a material custom-designed to do the job as you want it done. Write today.



**DECOTONE
PRODUCTS
DIVISION**

Fitchburg Paper Company
FITCHBURG, MASSACHUSETTS

MODERN PACKAGING

Introducing the NEW Thermatron

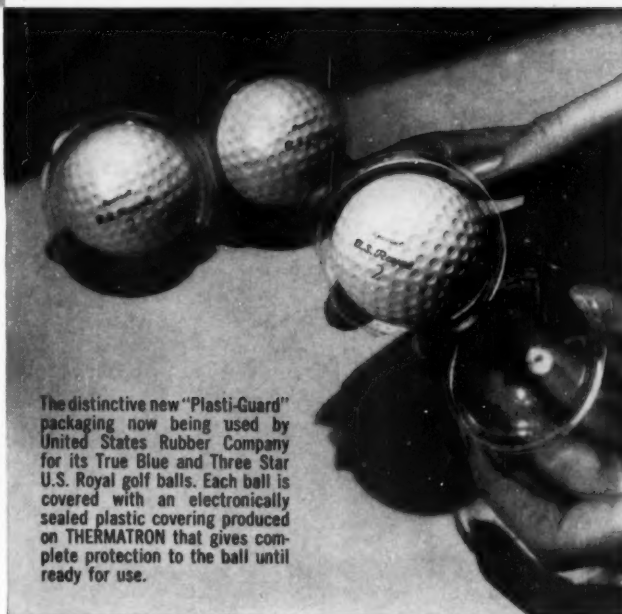


Acetate and Vinyl Packaging Machine

ELECTRONIC CONTOUR PACKAGING OF PLASTICS IN A SINGLE OPERATION!

Small items such as golf balls, razor blades, cosmetics, drug items, etc. can now be contour packaged in a single economical operation on the new THERMATRON acetate and vinyl packaging machine which consists of a THERMATRON high frequency sealing generator, sealing press and a turntable.

Acetate, rigid vinyl or a combination of rigid and soft vinyl may be used to create a package that is individual, attractive and practical. Eye appeal plus low cost make contour packaging the THERMATRON way a *must*.

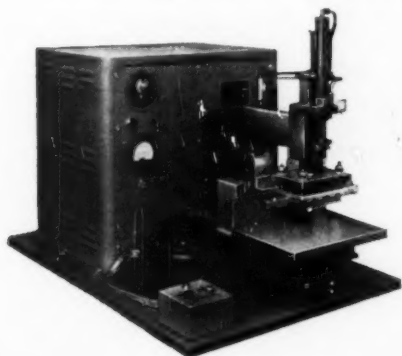


The distinctive new "Plasti-Guard" packaging now being used by United States Rubber Company for its True Blue and Three Star U.S. Royal golf balls. Each ball is covered with an electronically sealed plastic covering produced on THERMATRON that gives complete protection to the ball until ready for use.

T H E R M A T R O N

As many units as the THERMATRON generator can handle electronically are sealed in one operation, and in the case of golf balls that's three at a time. Sealing rate varies between 12 and 20 operations a minute, and ejection of the package may be automatic or manual. The entire machine is shielded and certified to conform to F.C.C. requirements.

For further information and specifications without obligation, write for Bulletin M-1.



Thermatron Division

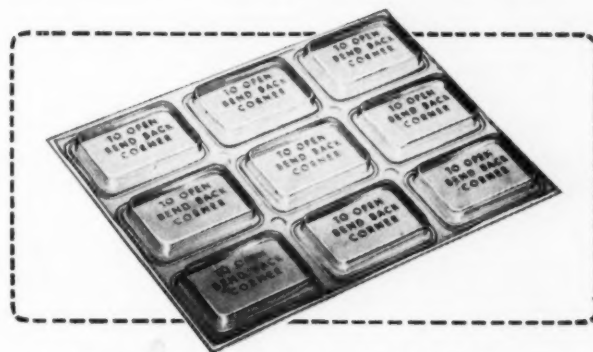
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Razor blades and drugs, etc. can be attractively displayed in these THERMATRON sealed plastic containers. Single items may be removed without spoiling the individual packages.

*this doctor takes
his own medicine!*



Versatile

VIS

VISQUEEN speeds production lines because it's tough, hard to tear, doesn't split, shatter or crack, doesn't block.

VISQUEEN is thrifty because it's uniform in thickness. You get more packages per pound of film.

VISQUEEN "C" takes print beautifully, helps build brand names. The ink stays on.

VISQUEEN can be sealed with heat, taped, tied or stapled.

Important! VISQUEEN film is all polyethylene, but not all polyethylene is VISQUEEN. The VISKING CORPORATION pioneered pure polyethylene film. Only VISQUEEN has the benefit of our technical skills and research. VISQUEEN is produced by process of U. S. Patents No. 2461975 and 2632206.

VisQueen®

film...a product of

THE VISKING CORPORATION

World's largest producers of polyethylene sheeting and tubing

Plastics Division, Terre Haute, Indiana

In Canada: Visking Limited, Lindsay, Ontario

For years it's been VISKING's job to write prescriptions that would solve packaging problems for others.

It's not surprising, then, that we took our own medicine when we faced a problem in moisture control.

VISKING's NoJax Casings (for SKINLESS franks) are at their best for processing when they leave the plant. They are packaged in an atmosphere containing just the right amount of water vapor. But the conventional shipping carton did not keep them in that state. Sometimes they got too dry. Sometimes they absorbed too

much moisture for their own good.

Exhaustive tests in the VISKING laboratories showed that a carton liner of **VISQUEEN** film would provide complete moisture control. Now every carton of NoJax contains a **VISQUEEN** liner. Casings are always in perfect shape for the packer's stuffing table.

Not only was our problem solved, but the solution gave us a clear competitive advantage which we are advertising to our customers.

If you have a tough packaging problem a **VISQUEEN** converter can help you. Use the coupon.

QUEEN[®]

takes care of a packaging problem
and adds a "plus" to a product

**VISQUEEN converters are top experts in
package design—ask for their help!**

Not only is **VISQUEEN** film a superior packaging material, but the converters who use it lead in design and manufacture, and are expert in solving tough packaging problems. They work with

VISQUEEN technicians to give you their own superior skills and VISKING's acknowledged polyethylene leadership. If you desire, they can put factory specialists—able chemists and engineers—right into your plant to help you. This coupon will bring their assistance!

THE VISKING CORPORATION, BOX H9-1410, Plastics Division, Terre Haute, Indiana

Send me names of VISQUEEN converters serving my area.

Name _____ Company _____
Address _____ City _____ Zone _____ State _____

FREE!
OF EXTRA COST
NEW "Scotch" Brand
M-92 Definite-Length
Dispenser...when you buy
a dispenser and 12 big rolls*
of "Scotch" Cellophane Tape
at regular price of
\$29.87

M-92 Definite-Length Dispenser

OFFER EXPIRES
OCT. 31, 1953!

HERE'S WHAT YOU GET: two improved models of the "Scotch" Brand M-92 Definite-Length Dispenser and 12 big 2592-inch x 1/2-inch rolls of "Scotch" Brand Cellophane Tape for only \$29.87—the regular price of the tape and *one* dispenser alone!

That means you get the extra dispenser **FREE** of extra cost. And what a dispenser it is!

The new broader base gives greater stability, pre-

vents tipping. The cutter blade is quickly replaced. The operating action is easier than ever.

See for yourself how this dispenser can cut your tape costs 1/3! See how it ends waste by delivering measured lengths (up to 4 inches long) right into the operator's fingertips.

Order today from your regular distributor . . . ask for the "DS" Deal.

TAPE PRICES CUT
You can now save up to 23¢ a roll on "Scotch" Brand Cellophane Tape in 1296-inch or 2592-inch rolls—1/2-inch wide or narrower. Order today!

*Tape can be assorted with your regular order of 1296-inch or 2592-inch rolls for quantity discount.

REG. U.S. PAT. OFF.
SCOTCH Cellophane Tape
BRAND

The term "Scotch" and the plaid design are registered trademarks for the more than 300 pressure-sensitive adhesive tapes made in U.S.A. by Minnesota Mining & Mfg. Co., St. Paul 6, Minn.—also makers of "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: 122 E. 42nd St., New York 17, N.Y. In Canada: London, Ont., Can.



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works
for
you*



Testing the physical properties of tinplate is one of the functions of John L'Abbate in the National Can laboratory. Every new development in tinplate manufacture is subjected to a long list of checks and tests — one of these is the "burst" test which helps evaluate the strength and quality of the tinplate to be used in your cans. Typical National Can service...where it counts!



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this for
versatility?



McKESSON & ROBBINS tubes 16 varieties of products on their ARENCO fillers

IN THE BRIDGEPORT, Connecticut, plant of McKesson & Robbins, Inc., leading pharmaceutical manufacturer, Arenco Fillers are used to fill this amazing assortment of products into tubes. The tubes range in capacity from $\frac{3}{4}$ oz. to $4\frac{1}{4}$ oz., and the consistency of the creams and ointments varies from light viscosity to quite sluggish.

McKesson & Robbins is able to handle all these products on their Arenco's because the machines can be completely cleaned in under 20 minutes, and tube sizes can be altered in 20 minutes.* Only stainless steel or resistant metals contact the products being filled. And all of these parts—including the stainless steel single cylinder pump—

are easily and quickly demountable for cleaning and sterilization.

Arenco Fillers, with minor adjustments, will also fill jars, vials and ampoules. Even at speeds of 55 fills per minute, accuracy surpasses strictest commercial requirements. Maximum fill capacity is 250 cc (8 $\frac{3}{4}$ ounces).

The same quarter century old organization which maintains 2,000 other Arenco machines of all types in every part of the country services Arenco Fillers. Competent mechanics and complete stocks of spare parts are always on hand. The nearest Arenco representative can supply full details. Contact him now.

*Tube sizes can be changed in just 15 minutes on models now being delivered.



Hopper or filling head to fit product. No container, no fill. Automatic cleaning and cap tightening for tubes.

ARENCO Machine Co.

INCORPORATED

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SAVE
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Note these **FEATURES** of
EZE-STIK Model ES-6
Automatic Label Dispenser

- Takes any width roll from 1/2" to 4".
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- Dispensing speed from 0 to 130 inches per minute, rheostat control.
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GREATLY INCREASED PRODUCTION
LOWER OPERATING COSTS
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EZE-STIK

**Automatic
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Dispenser**

**for
Self-Adhesive Backed
Labels**

\$225⁰⁰

FOB Shipping Point

Higher labeling speeds and steadier production line operation follow immediately when this automatic label dispenser goes to work.

Since the advent of modern, self-adhesive labels on rolls, no better, more efficient aid to hand labeling has been developed.

Handles labels in rolls in all commonly used sizes.

All work previously required for preparing the label for affixing is now done by the dispenser—which projects the label to the operator's hand—ready for instant application to the product.

Operates at any set production line speed from 0 to 130 inches per minute, instantly changeable by the operator—rheostat control.

Operators work with dry, clean, efficient hands. The labeling speed of the individual operator is greatly increased.

The dispenser is streamlined designed, portable and compact, fitting into any production line.

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SOLD ONLY THROUGH LABEL PRINTERS

YOU'LL NEVER KNOW *how simple labeling can be;*
—how much more you can produce,

UNTIL YOU TRY

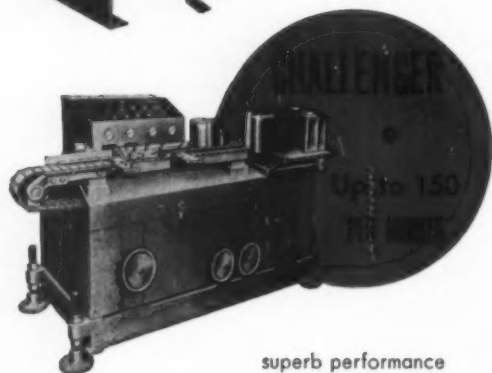
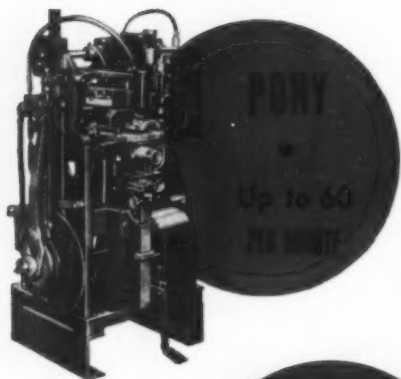
DRY LABELING

With any one of these machines, keep your hopper full of labels, and keep your containers coming along the line . . . then, "from whistle to whistle", IT'S ALL PRODUCTION TIME! No time-cut for any of the fussing that goes with glue when you use a

LABEL-DRI®

Dry labeling on the CHAMPION and CHALLENGER is PUSH-BUTTON, non-stop, constant-motion, precision labeling . . . It's

Labeling without glue!



superb performance
with round, tapered
or flat containers.

533



HERE'S WHAT YOU AVOID!

No glue preparation; no
fussing to maintain the
proper glue viscosity; no
daily clean-up; all of
which means elimination of
downtime with any of these
Label-DRI's . . .



Ask for details!

NEW JERSEY MACHINE *Corporation*

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Heat-Sealing this pouch bag for fine powder is no problem!



Coating of "Alathon" provides leak-proof heat seal and extra strength for pouch containing extremely fine surgical powder

Developing a pouch bag for extremely fine powder usually presents a tough heat-sealing problem. At high packaging speeds, the powder dusts into the sealing areas . . . either interferes with the heat-sealing operation or shortens the life of the seal.

This was one of the problems facing the packagers of "Bio-Sorb"—a surgical dusting powder of 300 to 400 mesh fineness—when they investigated the use of single-service pouch bags. The heat seal has to be strong and permanent to prevent the fine powder from leaking. And, because "Bio-Sorb" must be sterilized before it is used, the heat seal has to have good physical properties at elevated temperatures.

After testing many thermoplastic coatings, the packager selected a pouch bag of 21# white pouch paper with a 1/2 mil coating of "Alathon" polyethylene resin on the inside. They found that the "Alathon" on this package permits trouble-free, sift-proof heat sealing, stands up well at sterilization temperatures, adds extra strength to the pouch.

Perhaps "Alathon"—with its unique combination of properties—can help you solve a difficult packaging problem. "Alathon" resists most greases, acids and alkalis. It has a low rate of water transmission. And, of course, "Alathon" is tasteless, odorless and non-toxic.

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... THROUGH CHEMISTRY**

Polychemicals
DEPARTMENT
PLASTICS • CHEMICALS

WRITE FOR FREE BOOKLET

describing the properties and uses of "Alathon" in the packaging field, or simply mail this handy coupon. We'll gladly put you in touch with sources of supply for packaging materials coated with "Alathon."

E. I. du Pont de Nemours & Co. (Inc.)
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Please send me the new booklet on packages using coatings of "Alathon."

Check type of package most interested in: Multi-wall bags (☐),
Single-ply bags (☐), Pouch bags (☐), Fiber drums & cartons (☐),
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Name

Title

Company

Address

City State

Picture your package

Closures...

Peak sealing efficiency is matched by the smooth-working performance of every Alcoa Aluminum Closure. Shown on these well-known permanent wave lotions is Alcoa's famous Pilferproof Seal, guardian against tampering, pilferage or substitution.

Tubes...

Smart in appearance, sturdy and dependable in use, low in cost...these are the features that make Alcoa Aluminum Collapsible Tubes the choice of leading manufacturers in many fields. Tubes are available in a complete range of sizes and neck styles or individually designed by Alcoa to meet specific requirements.



...in *Aluminum*

Foil...

From smokehouse to skillet, the distinctive flavor and quality of this ranch style bacon is protected by its sparkling wrap of Alcoa Aluminum Foil. Created for the Field Packing Company, by Milprint, Inc., this attractive container typifies the growing trend toward more efficient, sales-winning packaging in Alcoa Foil and foil laminations.



Pioneer in the field of aluminum packaging, Alcoa is continually developing new and more efficient applications for the many packaging materials it manufactures. If you have a packaging problem or wish latest information on any phase of packaging in aluminum, we will gladly share our facilities and experience with you. Competent packaging consultants are readily available through your local Alcoa sales office, listed under "Aluminum" in your classified phone directory. Call us, or write direct to: Aluminum Company of America, 1760-J Alcoa Building, Pittsburgh 19, Pennsylvania.

Alcoa
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ALUMINUM COMPANY OF AMERICA

CROMPTON

Velvet or Velveteen, to hold beautiful things!



Beautiful things deserve the proper setting of exquisite boxes, containers or cases that are lined or covered with Crompton Velvet or Velveteen. For these luxurious, glowing fabrics dramatize your products, attract customers to buy them. The velvet box is your permanent showcase . . . your most effective salesman . . . selling your products NOW and at the same time building up business for the future.

The box made of Crompton Velvet or Velveteen will last even after the immediate use of your product has been exhausted. For instance, as a treasure chest to adorn dressing tables . . . to store trinkets, cuff links, odd-and-ends. With your trade name permanently inscribed on its rich surface, your box will continue to advertise your product.

If your business is the manufacturing of compacts, vanity cases, lipstick cases, cigarette holders, lighters, pillboxes, jewelled novelties, etc. . show them off in boxes of Crompton Velvet or Velveteen.

Crompton-Richmond Co., Inc.,

The Pioneer of American Corduroy & Velveteen—Est. 1807
1071 Avenue of the Americas, New York 18, N. Y.



CROMPTON
WILL BE GLAD
TO SUPPLY YOU WITH
A LIST OF BOX
MANUFACTURERS WHO
WILL HELP YOU
DESIGN A PRACTICAL,
EXCITING PACKAGE
FOR YOUR
PRODUCT.

Slitting—full SPEED



Razor edge cutting! Smooth performance! High production! Low operating cost! The Beck Razor Blade Slitter and Rewinder handles cellophane, plastics . . . and a tremendous number of other fine materials. It smooths out wrinkles, slits at high speeds with a clean, accurate cut . . . assures neat, firmly rewound rolls. It's the controlled performance you can count on for high production at minimum cost. The word "SLITTER" on your letterhead brings full information.

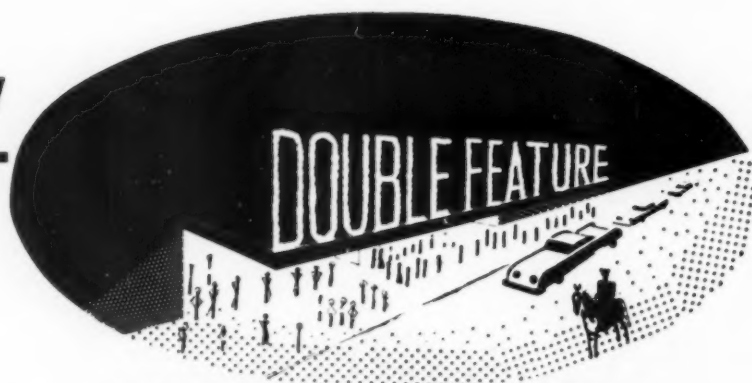
CHARLES BECK
406 N. 13th Street

BECK

MACHINE CORPORATION
Philadelphia 8, Pa.

Pacemakers since 1864 in the ENGINEERED APPLICATION of SHEET CUTTERS and SLITTERS

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the...



...Advantages of Low Cost



4 COLOR PRINTED KRAFT GUMMED SEALING TAPE

THE
STANDARD COLORS
ARE RED, BLUE,
YELLOW AND BLACK

FEATURE 1

Every carton and package leaving your plant carries your 4-colorful advertising message everywhere. (Our creative art staff will skillfully prepare art work to fit your particular needs. Free Ideas and sketches submitted with 25 Bundle minimum orders.)



FEATURE 2

Your packages are padlocked with your company's name — they're pilferage proof.

EXTRA ADDED ATTRACTIONS:

- ★ Dust and dampness are locked out
- ★ On-To-Sta Tape Seals and remains perfectly flat
- ★ The uniform quality of On-To-Sta Kraft Sealing tape is protected in waterproof wrapping paper

ATLANTIC

GUMMED PAPER CORPORATION

PRINTED TAPE DIVISION

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in the family of **PLANNED PACKAGING**



THE SIX EXAMPLES of package design and production illustrated above were cited for special recognition by the jury of awards of the Fibre Box Association in the annual competition for 1953. They are typical products of the complete and coordinated facilities of our **PLANNED PACKAGING**.



THE OHIO BOXBOARD CO.

Home of "PLANNED PACKAGING"

RITTMAN • OHIO

Manufacturers of paper board, folding boxes, corrugated and fibre shipping containers, and converted specialties
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HAYSSSEN MFG. COMPANY

Dept. MP-9 • • SHEBOYGAN • WISCONSIN

wrap textiles
automatically
on the *Hayssen*



HAYSSSEN AUTOMATIC TEXTILE WRAPPING MACHINE

Hayssen Automatic Textile Wrapping Machines produce neat packages, with wrapping that fits like a glove. Printed designs are registered, and uniformity in appearance is maintained. The Hayssen is fully automatic . . . low in initial cost . . . easily adjusted to wrap a wide range of sizes . . . and keeps the unit-cost of wrapping at a low level. Wraps cellophane, pliofilm, laminated cellophane, polyethylene, sulphide or kraft paper.



IT PAYS TO WRAP
THE HAYSSSEN WAY



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**BBD
FLEXOGRAPHIC
INKS**

TRANSPARENT	New high-gloss ink for sparkling face-printing on coated* cellophanes and treated polyethylene
EXCELLOFAST "BBD"	Opaque pigment inks for all types of cellophane*, foil, treated polyethylene, glassine and paper
TRANSPARENT	Lustrous transparent dye ink for glassine
FOIL-PRINT	Glossy color-rich dye ink specially formulated for excellent adhesion and flexibility on aluminum foil
WATER-SOLUBLE	A water solvent ink for corrugated and other absorbent stocks — resistant to water when dry
MATTE-FINISH	A matte-finish, alcohol-soluble ink that prints without wrinkling on lightweight tissue
COMBINATION	Combination pigment-dye ink with high color strength, developed especially for kraft and other paper stocks

*except Saran coated

Richer, stronger colors . . . cleaner, sharper prints that stand up under rough handling at the point of sale — that's what you get when you use **BBD FLEXOGRAPHIC INKS**.

And that's not all — because **BBD INKS** are *tailor-made* to your own specifications you also get better mileage . . . faster running speeds . . . higher production due to fewer stops for washup.

Whatever you print — on any flexographic press — you'll do a quality job with **BBD FLEXOGRAPHIC INKS** in the fountains.

For information or service contact your nearest **BBD** office . . . or write direct to **Bensing Bros. & Deeney**, 3301 Hunting Park Avenue, Philadelphia 29, Pa.



• For real "shirt-sleeve" technical service call in a **BBD** flexographic ink specialist



Bensing Bros. and Deeney
SALES COMPANY

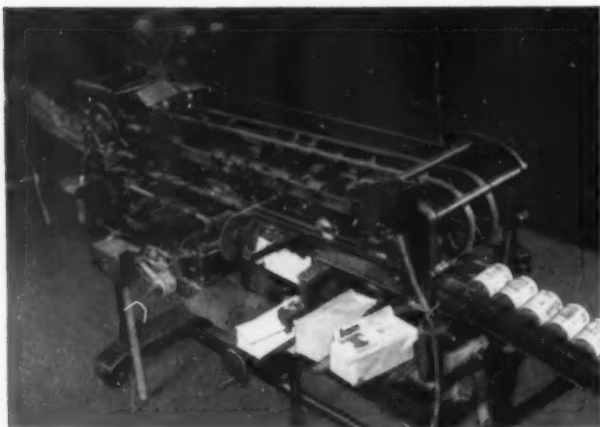
Flexographic Ink Specialists

PHILADELPHIA • CHICAGO • WAKEFIELD, MASS.

Pacific Coast: A. M. BOJANOWER, Los Angeles

Export: McLAURIN-JONES CO., New York

Canada: MANTON BROS., Toronto



LABELING CANS ON STANDARD KNAPP LABELING MACHINE



SHOWING PAISLEY LAP BELT PASTE IN ACTION



SHOWING SIZES OF PAISLEY LUMP HOT PICK-UP GUM



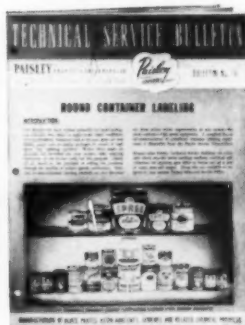
Smooth, Flat Laps . . Positive Pick-Ups . . *At Top Speeds!*

Paisley Laboratories have developed a remarkable team of Adhesives for can labeling machines. Whatever the equipment or container temperatures, there's a Paisley Adhesive specially designed to give you the greatest possible labeling speed, efficiency, and economy.

Improve appearance, step up production and cut costs with these *better*, more uniform Paisley Adhesives. It will pay you to have complete technical data and information about newest can labeling methods and machinery. The Paisley Technical Service Bulletin No. 16 gives you all the facts—send for it now!

FREE . . Valuable Data On Can Labeling!

This 8-page Round Container Labeling Bulletin, fully illustrated and punched for 3-ring binder, tells you how to achieve clean, neatly labeled, salable containers at low cost. Just tear this ad, clip it to your letterhead, indicate your name and mail to us now. Your free copy of this helpful bulletin will be sent along at once.



PAISLEY PRODUCTS INCORPORATED

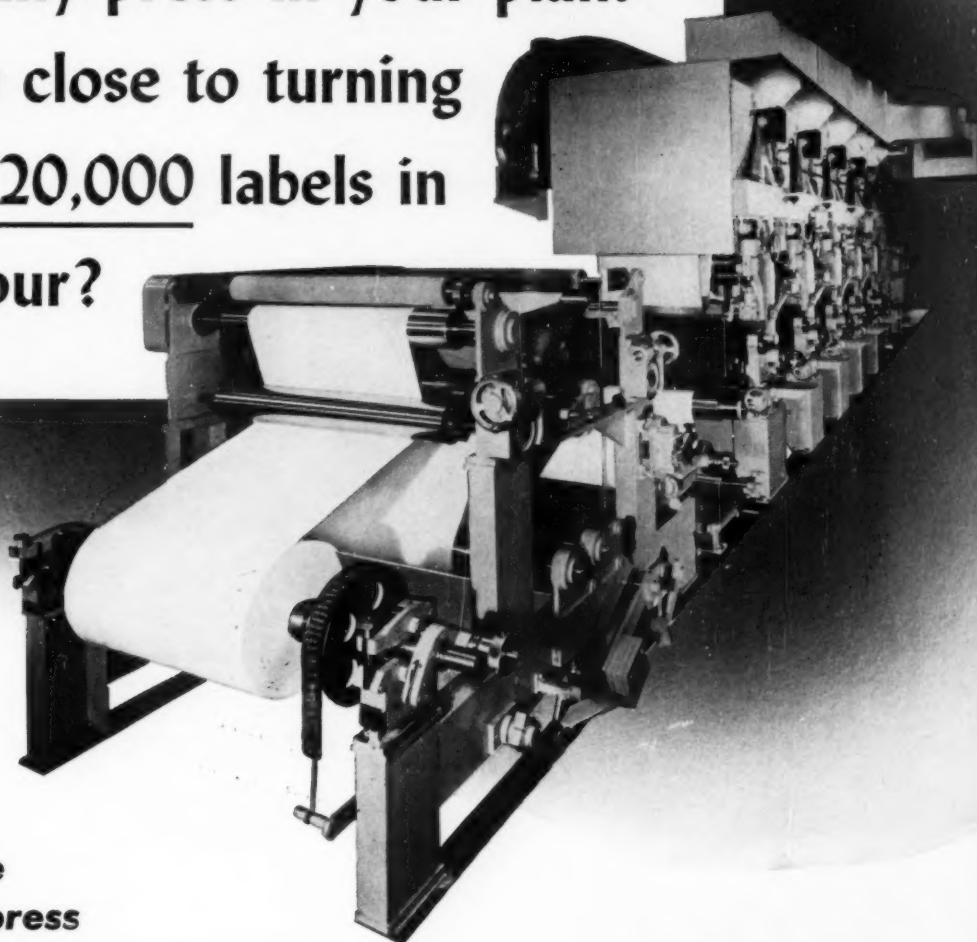
Division of MORNINGSTAR, NICOL, INC.

1770 CANALPORT AVENUE, CHICAGO 16, ILLINOIS • PHONE CANAL 6-2219
630 WEST 51st STREET, NEW YORK 19, N.Y. • PHONE COLUMBUS 5-2860

Manufacturers of Glues, Pastes, Resin Adhesives, Cements and Related Chemical Products

Can any press in your plant
come close to turning
out 720,000 labels in
an hour?

**That's the
average
production
on one
ATF-Klingrose
rotogravure press**



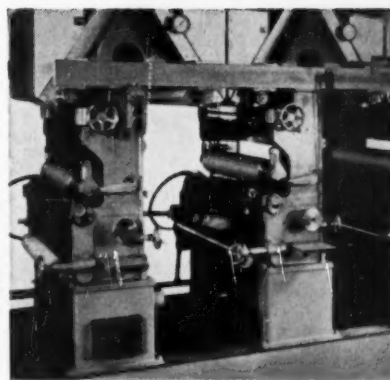
● But great speed is only part of the story. This particular press is running four colors, one of them a clear gold lacquer. Each color is bone dry before the next is overlaid. Stock is foil, laminated to paper.

Five miles of web pass through the press every hour. The sheets of $4\frac{1}{4}$ " x 3" labels are edge-trimmed and sheeted to absolute register, then pile-cut under the guillotine. You've seen them time and again on bottles containing a nationally known beverage.

We've spelled out the production details on this particular job to give you a graphic illustration of what ATF-Klingrose rotogravure presses can do for you, especially in high volume, high-profit production of labels in as many as eight colors on cellophane, glassine, foil or other materials. It may also surprise you to learn that a five-color ATF-Klingrose costs no more than a comparable two-color offset press.

And every ATF rotogravure press is "production-proved" to performance specifications *before* delivery, using *your* engraved cylinders, *your* inks and *your* web material.

We'll be glad to furnish further information on request. Write to American Type Founders, Mt. Vernon division, a subsidiary of Daystrom, Inc., Mount Vernon, N. Y.



WALK-IN CONSTRUCTION of ATF-Klingrose presses permits the quickest changeover from one job to another of any rotogravure press on the market. Washup can be completed in fifteen minutes for each color.

Better, More Profitable Printing from the Widest Line of Processes

GRAVURE... LETTERPRESS... OFFSET

ATF



AMERICA'S *finest* PAPER BAGS
CARRY THIS
MANUFACTURER'S
LABEL



These modern packages have maximum eye and sales appeal. They represent just a few AMERICAN bags designed and produced for leading food and specialty processors and packers.

- ★ AMERICAN bags are manufactured in volume on modern automatic equipment that keeps quality *up* and prices *down*.

We will be glad to submit ideas, samples and prices on your own paper bag requirements.

YOUR INQUIRY IS INVITED

WE ALSO MANUFACTURE
another quality bag with
many exclusive features.
**"The PAPER BAG with
VACUUM FRESHNESS"**
KARD-O-PAK gives paper bag cost and versatility
plus vacuum freshness. Made with a heat-sealable,
plastic interliner that LOCKS IN freshness, flavor,
aroma. LOCKS OUT moisture, air, odors.
KARD-O-PAK is the featured QUALITY BAG of
many leading food and specialty packers.



AMERICAN BAG AND PAPER CORP., Water and South Sts., Phila. 47, Pa.



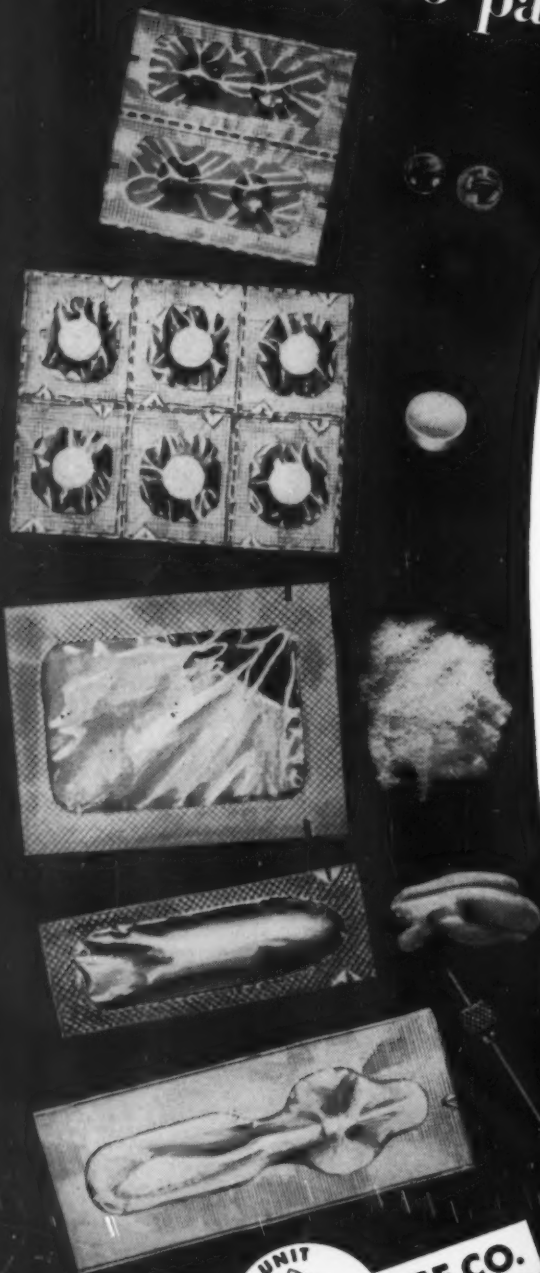
stops the eye . . . starts the sale pack to attract in maryland blue

Here is true double-take packaging. It stops the busiest shoppers . . . stops their eyes and starts the sale. It's double-duty packaging, too. Acts as a strong, practical container and as a powerful advertising, merchandising and selling tool. Maryland Blue Glass makes your product stand out and shout "Buy Me!" So follow the lead of many famous brands . . . pack to attract in Maryland Blue. Write for samples today.

MARYLAND GLASS CORPORATION • BALTIMORE 30, MARYLAND

also available in clear glass

You have no packaging problems



Not when you have the complete facilities of Ivers-Lee at your disposal. For here at **IL** we can design your package to fit your product . . . be it capsule, tablet, powder or cream — hypodermic needle or any other odd shaped article. The quantity can be great or little — for sampling or for standard sale use.

The **IL** Super-Sealtite package, with *Feather-Light Tear, is adaptable to a very great variety of products, packaging materials and package types. This is your guarantee of the world's finest package at a cost below that of ordinary packages.

To have the **IL** Super-Sealtite package for your product calls for no capital outlay on your part. You simply send us your product in bulk — we will return it to you packaged and ready for shipment . . . and in time to beat all reasonable deadlines.

Your request for **IL** Super-Sealtite samples and details of the complete **IL** service will receive a prompt reply.

*REGISTERED

Attention! Super-Sealtite provides —

*Feather-Light Tear (not just a series of pin-point perforations).

Double tear notches — on opposite sides of each pocket.

Complete Protection attained through selection and adaptation of the right packaging material for your product.

Easy Adaptation of package to varying product sizes, requirements and new package design.

These are the plus features you get from . . .

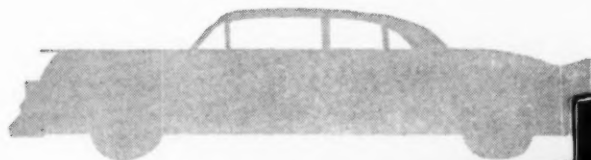


Creators of SUPER-SEALTITE — the Package That Never Stops Selling

"Reach" magnetism

Self-service is today's fastest growing sales trend. Getting consumers to reach for your product is the key. Frequently, the deciding factor is your package. Let Old Dominion help give your package more "reach" magnetism. A complete idea team supported by unexcelled box making facilities is at your command. Example: Sears Roebuck & Company's machine packaged carry-home oil carton.

Carton blanks by Old Dominion. Cartoning machinery by Dacam Corp. Unique feature of Dacam packaging system is that carton is formed around the containers rather than containers being filled into carton. Result: a superior carton packaged at less cost.



OLD DOMINION *Box Company Inc.*

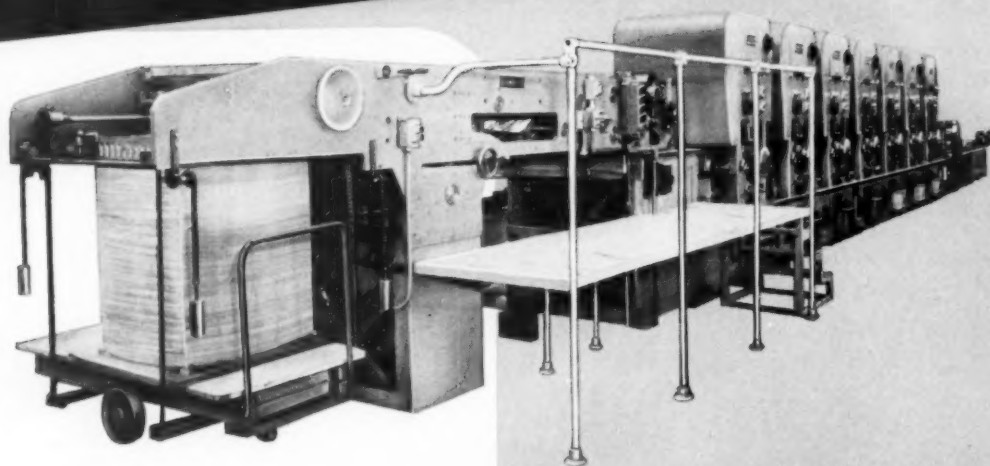
PLANTS LOCATED THROUGHOUT THE SOUTH

Executive Offices: LYNCHBURG, VA. • Sales Offices: CHARLOTTE, N. C.

THE SOUTHERN BOX MAKER WITH A NATIONAL REPUTATION

NOW! A ROTOGRAVURE PRESS

that Delivers Sheets **1 1/2** Times Faster!



NOW—for the first time—you can take advantage of the high speed of modern rotogravure presses for label and wrapper printing. Improved Champlain Sheet Delivery—operating inline with a Champlain Rotogravure Press—delivers square-cut sheets with 1/64" accuracy 1 1/2 TIMES FASTER THAN ANY OTHER STANDARD SHEETER!

Standard Sheet Sizes	Speeds*						Max Width	Max Length	Min Length
	Glassine & Paper Backed - Foil		Label Paper		Heavy Paper & Cardboard				
	Ft. Per Min.	Sheets Per Hr.	Ft. Per Min.	Sheets Per Hr.	Ft. Per Min.	Sheets Per Hr.			
20"	400	11,000	450	12,500	500 up	14,800	21"	26"	13"
26"	400	8,500	500	10,500	500 up	12,500	28"	34"	17"
36"	400	8,500	500	10,500	500 up	12,500	37"	34"	17"
44"	400	8,500	500	10,500	500 up	12,500	43"	34"	17"

*Based on 100% efficiency and 100% uptime.

ADVANTAGES?

Here are just a few:

For Rotogravure: high-speed precision-register printing on practically any stock in multiple colors—ideal for meeting the increasing demand for high-quality, high quantity wraps and labels for packaged products.

For Improved Sheet Delivery: greater production with inline economy.

PLUS

- **HIGH SPEED**...from 8,500 to 12,500* sheets per hour—chart at left shows full range.
- **ACCURACY**...cuts consistently square sheets to 1/64" or finer accuracy from any stock—any speed.
- **SHEET PROTECTION**...exclusive individual sheet handling insures accurate jogging—undamaged front edges.
- **JAM-PROOF**...separate handling of each sheet with continuous individual movement acts as self-clearing mechanism—DANGER OF TEARING, FOLDING, BUCKLING, OR COCKING IS PRACTICALLY ELIMINATED.
- **NO WASTE TRIM**...easily adjustable to any sheet-width or length within the range of the press. This feature—plus consistent accuracy—produces sheets ready for the ream cutter.
- **VERSATILITY**...handles paper, board, foil, and most specialty stocks with equal ease.

Write today for catalog of Champlain press equipment and full information on Champlain Improved Sheet Delivery. Champlain Company, Inc., 88 Llewellyn Avenue, Bloomfield, N. J. Chicago Office: 520 N. Michigan Avenue, Chicago 11, Ill.

Champlain &



Champlain manufactures a complete line of rotogravure, aniline, rotary letterpress and allied equipment for packaging and specialty printing.

Quality DEMANDS

Quality



**WITH REVENUE
STAMP ATTACHMENT**

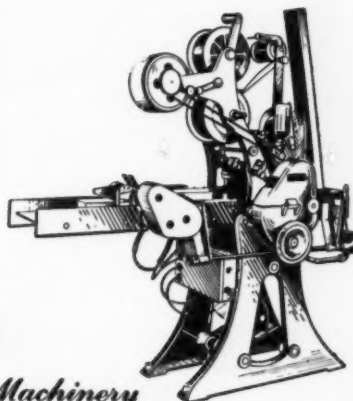
SCANDIA'S all rotary continuous motion means higher wrapping efficiency with lower maintenance costs. The compactness of design saves valuable floorspace. All types of special attachments are available, such as Opening-Tape Units, Automatic Intakes and Special Discharge Stackers, Electric Eye Registration Units, Booklet and Card Feeds, etc.



SCANDIA

Manufacturers of Better Packaging Machinery

• 500 BELLEVILLE TURNPIKE • NORTH ARLINGTON, N. J. •



BUNDLING • BANDING • MULTIPLE WRAPPING • STAMPING • HIGH SPEED WRAPPING

Rates kisses for the Mrs !

Whether she's baking to please a man 29 . . . 9 . . . or 90 . . . the lady of the house knows she is sure to win praise when she uses Wesson Oil in her recipes.*

Liquid Wesson Oil makes measuring easy . . . quick . . . exact . . . it blends perfectly with the other ingredients. You'll find housewives everywhere keep Wesson Oil handy for frying and for making salads, too.

* Wesson Oil is distributed by Wesson Oil and Snowdrift Sales Co., New Orleans 12, Louisiana.



The closures on the Wesson Oil bottles are dependable Crown Screw Caps with liners selected especially for this type of product. If you would like to know which type of closure and liner is best for your product . . . call your Crown Closure Representative . . . ask him to tell you how our laboratories will provide you with this information. Or, if you'd rather, write to us direct. Crown Cork & Seal Company, Baltimore 3, Md. *World's Largest Makers of Metal Closures.*

CROWN CLOSURES

Approved by millions of housewives



Label's on

in the blink of an eye

(1/5 of a second, that is)



with adhesives using
Monsanto PLASTICIZERS

Adhesives using Monsanto Plasticizers are helping packagers label five bottles every second. The labels stick with no smear. The seal is firm, permanent and moisture-resistant. Result: The packager saves time, gets a better-looking package that remains good-looking throughout the time it is on the shelf—and the more attractive appearance shortens its stay there.

Other Monsanto plasticizers are being employed in adhesives used to bond plastic, paper, wood, metal and foil.

Want more information about Monsanto plasticizers and their use in adhesives? Write for new Technical Bulletin O-99. MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, 800 North Twelfth Blvd., St. Louis 1, Missouri.



SERVING INDUSTRY...
WHICH SERVES MANKIND

AWR

YOU have CAPTURED the AMERICAN MARKET — why not the BRITISH?

A leading and progressive London Company, engaged in paper and allied packaging trades and having unequalled connections with largest tobacco, confectionery, general food and allied manufacturers, is anxious to collaborate with American or Canadian interests engaged in the manufacture or selling of specialty packaging materials, with a view to establishing or extending sales in Great Britain.

Limited factory facilities are available and we would consider manufacture under licence or by other arrangements.

At present we are engaged in sales of aluminum foil, polythene, tear-tape, waxed-paper, glassine, vegetable parchment, and similar specialty protective packaging materials.

Reply to the Packaging Specialists:

ARTHUR WOOLLACOTT & RAPPINGS, LTD.

BLACKFRIARS HOUSE,
NEW BRIDGE STREET,
LONDON, E. C. 4., ENGLAND.
CABLE ADDRESS:—"SABELLUM CENT LONDON"

In rolling foil,
we stand "4 high" with our customers



Consideration

Cooperation

Control

Confidence

Aluminum Foil



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THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

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Something New!

Steigerwald GOLD and SILVER

EMBOSSED
FOIL SEALS
ON PRESSURE SENSITIVE STOCK

World's fastest hand
labeling operation

It's worth a phone call
or letter today...

CHARLOTTE, MICH. I. M. Clark 612 So. Pleasant St. CHerry 1-2468	CLEVELAND A. C. Land & J. J. Fort 318 Hippodrome Bldg. CHerry 1-2468	DES MOINES L. H. Chappel 3812 W. Washington 70133	LOUISVILLE Joe Hermann 416 Jefferson St. WAAbash 1257
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MEMPHIS Edward Magnus 278 S. Front St. MEmphis 8-2574	MINNEAPOLIS J. E. and J. J. Moor 3329 DuPont Ave., So. LOust 5309	NEW YORK, N. Y. John H. McLaren 646 W. 125th St. MOument 2-0237	OAKLAND Jean S. Panten 608 Sixteenth St. TEmplebar 2-1745	ST. LOUIS Marvin Tates Company Arcade Bldg. GARfield 0741
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a. m. steigerwald co.

910 W. VAN BUREN ST. • CHICAGO 7, ILLINOIS

Taylor 9-5400



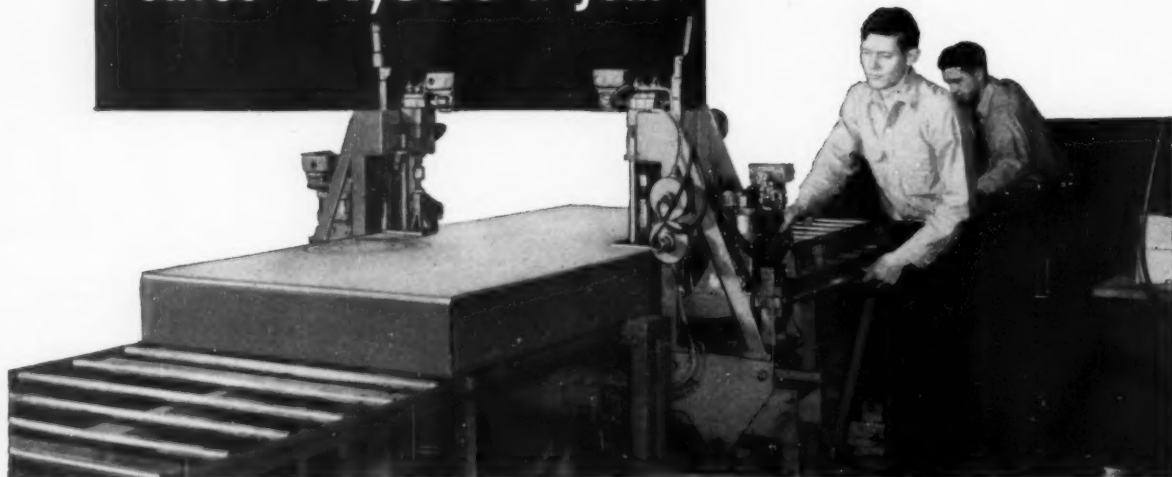
Just pick them off and
press them on. Stick
to all surfaces—Hold
securely where oth-
ers fail.

Remove easily—No
water—No Glue—No
Cleanup.



labels all kinds
all types
complete service

EXCELSIOR CO.
 staples bicycle cartons
 saves **\$11,000** a year



with International Stapling Machine



A daily savings of \$36 . . \$925 a month . . \$11,000 a year . . through the use of an International Retractable Anvil Stapling Machine!

Yes, these are actual cost reduction figures reported by H. W. Snyder, president of Excelsior Manufacturing Co., Michigan City, Indiana

. . and also Excelsior's parent company, H. P. Snyder Co., Little Falls, New York . . both nationally known manufacturers of bicycles.

Mr. Snyder has this to say about the multi-head retractable anvil stapling machine in use at the Michigan City plant:

"Our packing costs are way down. Formerly we had 7 men in this department . . but now with our International Stapler,

we use only 4 men. This frees *three men for other important work* in our plant.

"Carton stapling is faster. The per-man closure of cartons with the stapling machine is 19 . . compared to only 11 in the same period, using glue.

"Shipping and warehousing damages are reduced. We find holding qualities of staples excellent . . stapled cartons do not open in transit as was frequently the case when we glued our cartons.

"Working conditions are cleaner. With staples, we have no mess . . carton appearance is improved because we do not have the problem of glue spillage."

If you ship in corrugated or fibre cartons, an International Stapling Machine will close them better, faster and more economically. Write for details.

Have you seen the new sound-movie, "Package for Profit"? It shows International Stapling Machines at work in plants of well-known manufacturers. Ask about bookings.

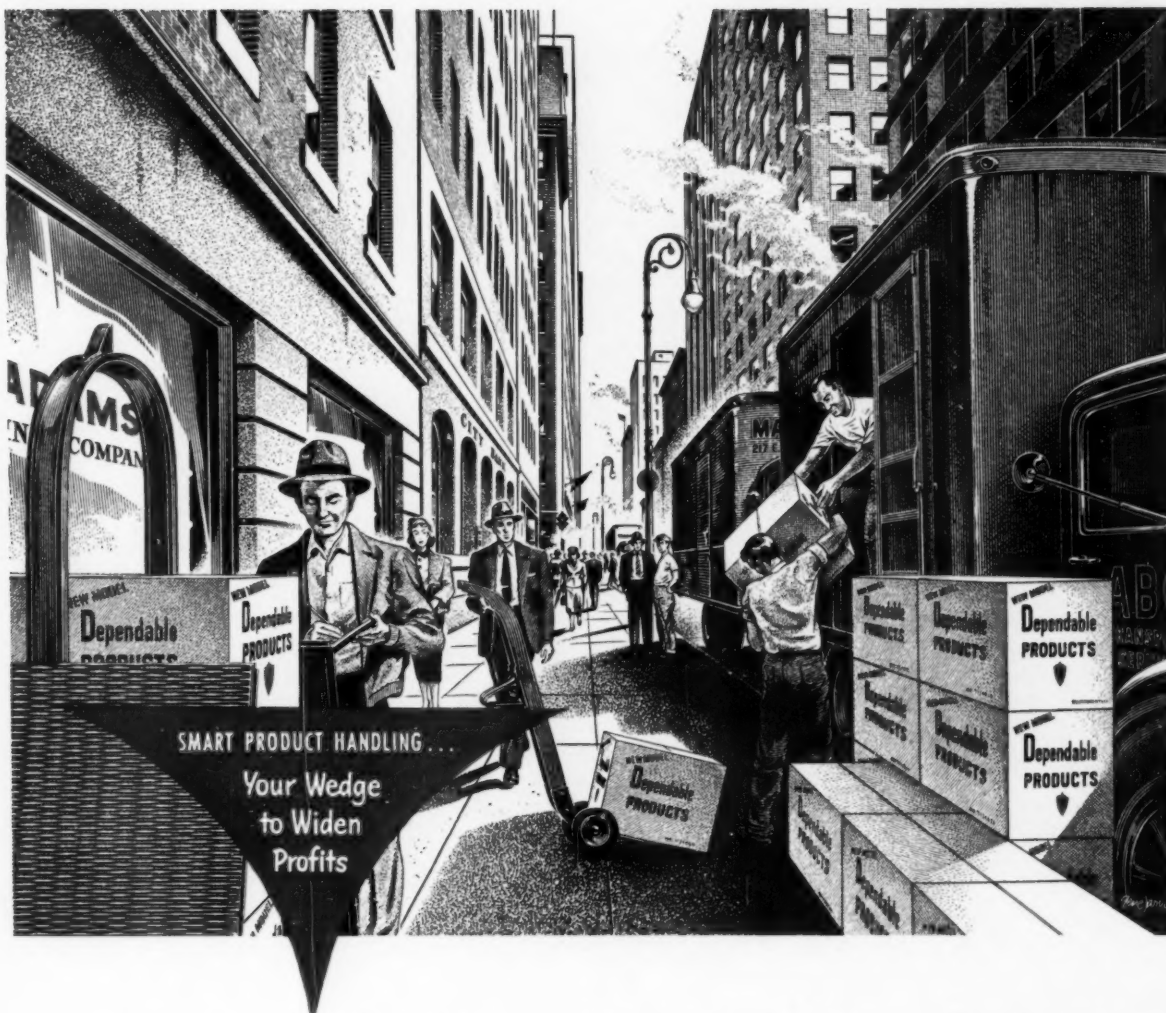
Package for profit . . use International Staples for faster, finer closures

a seal of security



INTERNATIONAL STAPLING MACHINES

International Staple & Machine Company
 806 East Herrin Street, Herrin, Illinois



Ship Your Sales Story Along With Your Product In Eye-Catching Gaylord Boxes

There are no extra freight charges for shipping a solid sales message on every attractively printed Gaylord box. You profit because your shipping dollars do double duty by promoting your product all along your channels of distribution. With these Gaylord "traveling billboards" you'll regularly reach hundreds of important buyers, sellers and handlers

who see your product before it's unpacked. Sizes, shapes and designs that work to promote your product, as well as to protect it, are an important Gaylord "extra" service . . . and with Gaylord's quality of materials and workmanship, you can be sure every box is as brawny as it is beautiful. For information and cooperation, phone your nearby Gaylord office.

GAYLORD CONTAINER CORPORATION

SALES OFFICES



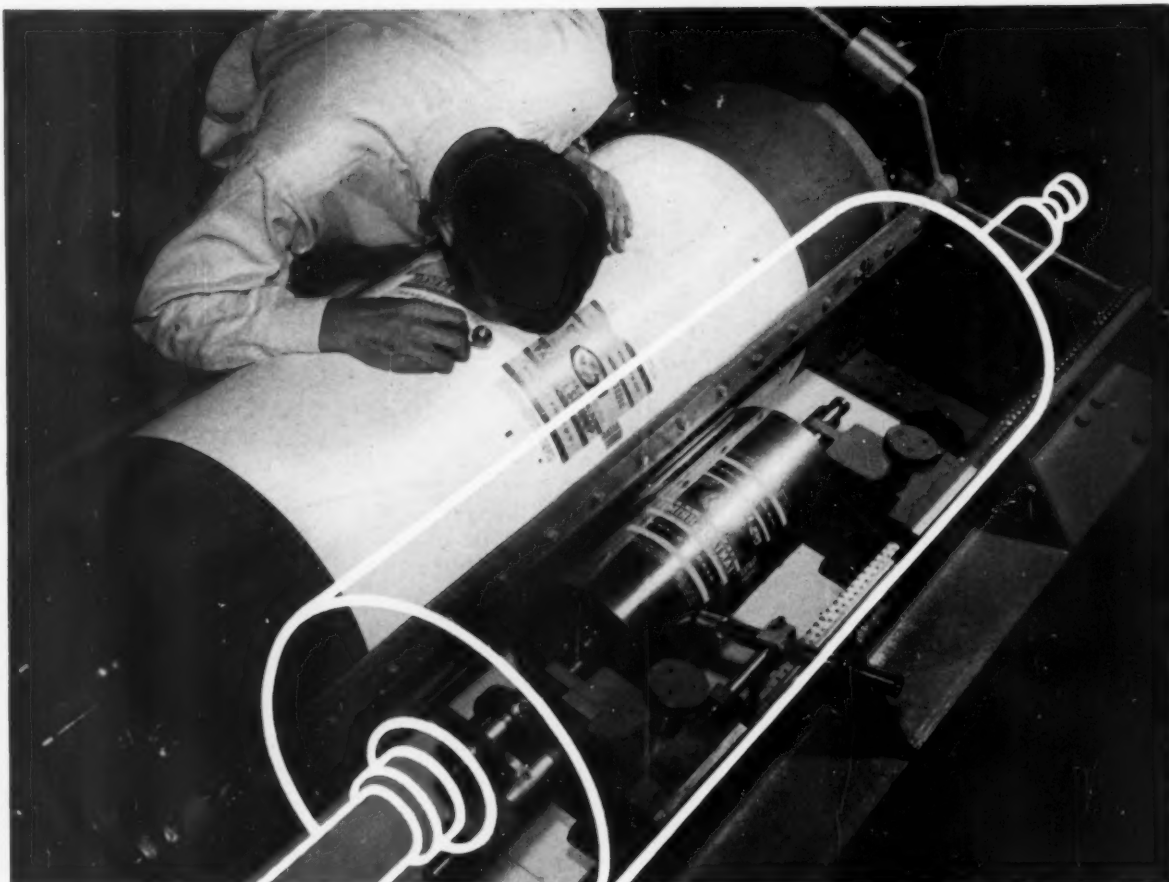
General Offices: SAINT LOUIS, MO.

COAST TO COAST

CORRUGATED AND SOLID FIBRE BOXES • KRAFT PAPER AND SPECIALTIES • KRAFT BAGS AND SACKS • FOLDING CARTONS

SEPTEMBER 1953

81



READY TO RUN

Beck precision engraved rotogravure cylinders are delivered to you READY TO RUN . . . with ADVANCE PROOFS to show your pressman the printing value and color matching expected on the finished order.

Rotogravure cylinders engraved by Beck are more than just ordinary printing cylinders . . . they offer protection for your sales investment by helping to insure you against wasted stock, press corrections, ink changes, lost orders.

A Beck representative is thoroughly experienced in gravure production, and offers that extra measure of service to help you protect your valued accounts. Call or write today!



ROTOGRAVURE CYLINDERS

The Beck Engraving Company • 105 South 7th Street, Philadelphia, Pa.

110
Fisher's Foils
57

fisher's foils

keep sales moving



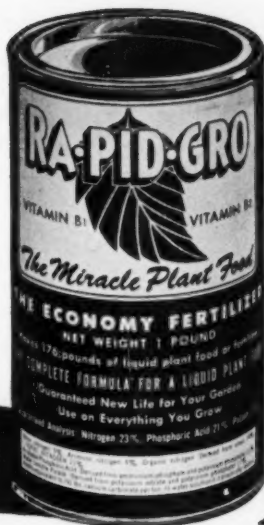
FISHER'S FOILS LTD. · EXHIBITION GROUNDS · WEMBLEY · MIDDLESEX · ENGLAND
TELEPHONE WEMBLEY 6011 CABLES LIOFNIT WEMBLEY (ABC CODE 6TH EDITION)



A Quality Product of **FISHER'S FOILS of LONDON, ENGLAND.**

Throughout all stages of manufacture, every roll of foil made by Fisher's Foils of England is *automatically controlled* for gauge consistency by the latest beam gauge. Send today for wide range of samples or ask our representative to call.

**fisher's
foils**



**Another Job
well done...
Packaging Chemicals!**

CLEVELAND CONTAINERS are IDEAL for dry chemicals!

More people today use chemicals than ever before . . . everyone from the lady of the house to the mechanic in the garage.

Each looks for a good product attractively packaged, convenient to use and store . . . but ALL look for one which will keep contents from deteriorating.

That's why CLEVELAND CONTAINERS are the answer.

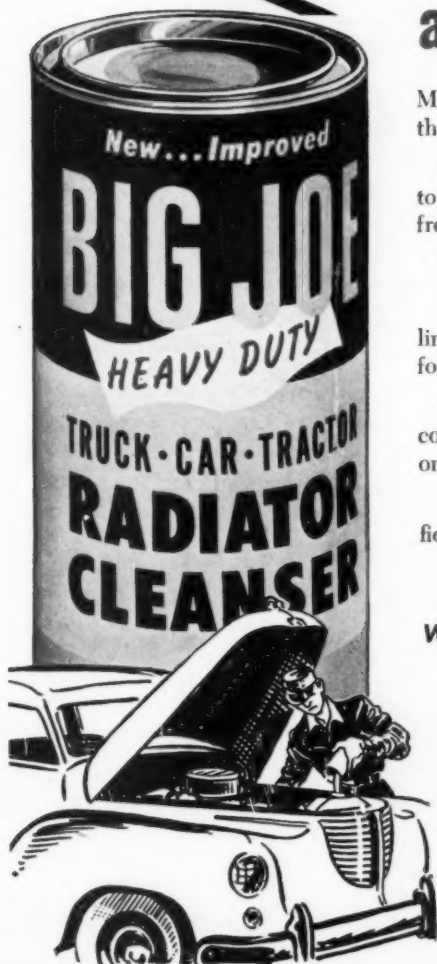
Added insurance against unnecessary deterioration with special liners, which are moisture resistant and greaseproof, such as aluminum foil, parchment, paraffin, glassine, etc.

Sizes and lengths as desired . . . closures, such as friction plug, slip cover, or screw cap; or with pouring spouts or sifter tops, depending on the product.

Exterior treatment . . . colored spiral wraps or labels may be specified for individuality and consumer acceptance.

Tell us your needs! Our engineering services are at your disposal.

WHY PAY MORE? . . . for the BEST, CALL CLEVELAND!



The CLEVELAND CONTAINER Co.
6201 BARBERTON AVE. CLEVELAND 2, OHIO

• All-Fibre Cans • Combination Metal and Paper Cans
• Spirally Wound Tubes and Cores for all Purposes

PLANTS AND SALES OFFICES: Cleveland, Chicago, Detroit, Memphis, Plymouth, Wisc.,
Ogdensburg, N.Y., Jamesburg, N.J. • ABRASIVE DIVISION at Cleveland.
SALES OFFICES: Grand Central Terminal Bldg., New York City; Washington
Gas Light Bldg., Washington, D.C.; West Hartford, Conn.; Rochester, N.Y.
Cleveland Container Canada, Ltd. PLANTS AND SALES OFFICES: Toronto and
Prescott, Ont. • SALES OFFICE: Montreal.



again the prize package*

another
Plaxpak®
bottle



the Charles S. Welch Packaging Award
of 1952, sponsored by the National
Toilet Goods Association.

It's almost trite to say: "Dr. Montenier does it again". But look at Stopette's partner — the Finesse Shampoo bottle. Contour, color, label and finish combine to say: "Pick me up. I contain a fine product".

A perfectionist, Dr. Montenier from the start has packed in Plaxpak, the original plastic bottle. He knows — as do other leaders — that Plax's unequalled experience means a better package. Plax is indisputably best equipped to help you achieve maximum success in plastic bottle packaging.



PLAX CORPORATION WEST HARTFORD, CONNECTICUT

Suppliers of Polyflex, Methaflex, PLAXPAK Sheet and Layflat

POLYFLEX®

Sparkling clarity, high rigidity, excellent stability and high yield are characteristics excellent for packaging — windows, envelope-type and drawn-form containers . . . a biaxially oriented polystyrene sheet which is odorless, tasteless, non-toxic and can be printed, formed, stamped, cemented. In gauges of .002" thru .020" in 20" and 40" widths.

METHAFLEX

New . . . biaxially oriented methyl-methacrylate sheet . . . all the character of the cost "Jewel" plastic in thin, tough sheet. Available now in .010" thru .020" in 20" widths. Thinner gauges later. Can be printed, formed, stamped, cemented. Samples, further details and prices on request.

PLAXPAK SHEET & LAYFLAT®

Natural polyethylene sheet in .004" thru .075" — embossed and some standard colors in .004" to .010" . . . especially suited to heavy duty and specialty packaging.

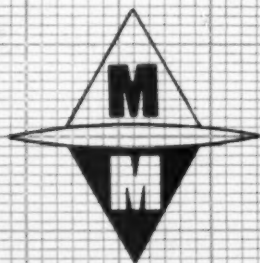
Layflat tubing in wide range of gauges and sizes for produce, freezer, garment and drum liner use. Unexcelled clarity and ease of heat sealing.

WAX PRICES: A CASE HISTORY

If you are interested in prices, here is an interesting case history:

Moore & Munger's 140 melting point HB wax (heavy line) is 10% cheaper today than it was in 1943, 30% cheaper than in 1948 — while the general commodity price index (light line) has soared.

In fact, the price of HB is lower today than it was in 1935, when all prices were near or at historical lows.



MOORE & MUNGER

33 Rector Street New York 6



Millions of jars of French's Mustard are labeled with PERVENAC® Dry-Labeling paper, a Nashua development. For glue-less, clean, fast, accurate labeling, step up to PERVENAC.

Spicy Sales Story

with

NASHUA PACKAGING

of Course

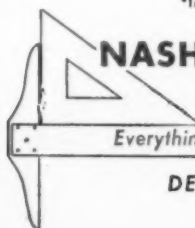
Sales leaders look to Nashua for good packaging and packaging ideas. So do the men whose new products will join the sales leaders of tomorrow.

Years of creative experience designing packaging that *sells*, that protects and enhances the product, have equipped Nashua to design the best solution to any packaging challenge.

Sales leaders, like French's and many others, whose sales have run into millions, can tell what Nashua packaging ideas have done for them.

The best way to see what Nashua can do for you is simply to call us. Tell us your story. For better packaging tomorrow, call NASHUA today.

*Trade Mark registered. Manufactured under U. S. Patent No. 2,462,029



NASHUA CORPORATION

54 FRANKLIN STREET
NASHUA, NEW HAMPSHIRE

Everything in Flexible Packaging that Sells

DESIGN / PRODUCTION

Upswing in unit packaging

Consumer acceptance plus new machines, new materials
and new techniques are spreading unit-of-use idea far and wide

The unit-of-use package has, in the short span of two decades, matured into a universally accepted, protective, convenient and economical form of packaging for thousands of products. It has fallen in line with consumer preference for smaller package sizes—with the growing realization that a freshly opened package is assurance of a fresh product. It meets the manufacturer's need for high-speed production and maximum protection at minimum cost.

There are almost as many definitions of "unit package" as there are packages. This discussion will be limited to what might be called the *unit-of-use* package, meaning that the contents of one package are customarily consumed in one serving, one dosage or one use of whatever nature. Typically, each package gives a small, premeasured quantity of a commodity which formerly had to be measured out of a larger container by the consumer at each use.

Although other forms may fall within the definition, unit-of-use packages are most familiar as the small packets or envelopes of heat-sealing papers, foils, films or laminations which are formed, filled and sealed by automatic machines and turned out at high speed in continuous strips. Such packaging is also called "strip packaging," particularly where the units are left in connected strips.

This kind of package has shown a

tremendous increase in the last two years, both in numbers and in kinds of products handled. On the market today in such unit-of-use packages are commodities as diverse as frozen orange juice, sundae toppings, pills, detergents, toothpicks, ball bearings, B-B shots, maple syrup, suntan lotion, salt and tooth paste.

It's time to take a look at this package and find out where it's going and why. The basic influences are fairly apparent:

1. Development and continuing perfection of new flexible-packaging

materials and combinations for an infinite variety of protective, mechanical and merchandising requirements.

2. Improvement of the old and introduction of many new types of unit-packaging and strip-packaging machines, engineered to handle new materials and laminations and capable of automatically and semi-automatically feeding a wider variety of products—including liquids. There are now machines available for any product—within size limits—for any volume of production.

3. The growing skill, flexibility and

PROMOTION has convinced consumers that unit-of-service foods in envelope packages are good foods, convenient to use. No. 1 promoter of this kind of packaging is Arthur Godfrey, who has sold Lipton's foil-packeted dehydrated soups to millions through television and radio programs.



The unit package
goes to the table



A CUP OF COFFEE from one of G. Washington's brightly colored foil envelopes packaging instant coffee.



WITH CREAM in powdered form, Pream unit pack—acetate-Pliofilm-foil laminate. PHOTO, SHELLMAR BETNER DIV.



EASY OPENING is provided by simple ingenuities in flap sealing. Tab on this polyethylene-coated paper envelope for Nestle's cocoa is simply an extended edge of the back side of the envelope, doubled under in sealing. It breaks seal and opens flaps without tearing.

services of contract packagers, with their huge batteries of machines engineered to cope with the most exacting unit-packaging specifications.

4. Refinements in the construction and use of the unit package, making it easier to separate from the strip, easier to open, code and dispense.

5. Packagers' acceptance of the unit or strip package as one of the most efficient, economical methods of sampling.

6. Growing familiarity with and general acceptance of the unit-of-use package by consumers—spurred by the outstanding promotional programs of such products as Lipton's Noodle Soup and other products with its Arthur Godfrey TV and radio programs.

Of course, flexible unit packaging

as such isn't new. Back in 1933, these packages were first made of cellophane, its heat-sealing properties greatly aiding high-speed production methods. As early as 1937 laminated combinations of paper, vinyl and aluminum foil were used to package individual tablets of Alka Seltzer and other drug items requiring a high degree of moisture protection. Not until World War II, however, did this kind of packaging spread much beyond the drug field.

Advances in materials

One authority has said that the machine engineering of 20 years ago could have produced some of the most advanced unit packages we now have. With that statement goes an "if"—if all the present packaging materials had been both developed and available.

The transparent cellophane unit with the heat-sealed edges has been probably the best known. But it is now joined by a number of other materials with the necessary thermoplastic characteristic, including coated paper, Pliofilm, coated foil, polyethylene, acetate, vinyl and many special combinations of these materials. And cellophane itself is used in combination with many of these materials.

Unfortunately, the manufacturer has no ready check list to tell him exactly what material to use. He must, of course, be guided by the chemical requirements of the product, the protection needed, the type of handling involved and, certainly, by what the customer expects from the package itself. He can, however, rely on the expanding experience of suppliers who, through extensive

testing and experience, are learning more about the suitability of their materials for an increasing number of products.

Luster, printability and dimensional stability are characteristic of acetate film. Vinyl, Pliofilm and polyethylene are often selected for the inside surfaces of unit packages because of their excellent heat-sealing qualities. Polyethylene is strong and inert and is found on frozen products because of its outstanding performance at subzero temperatures.

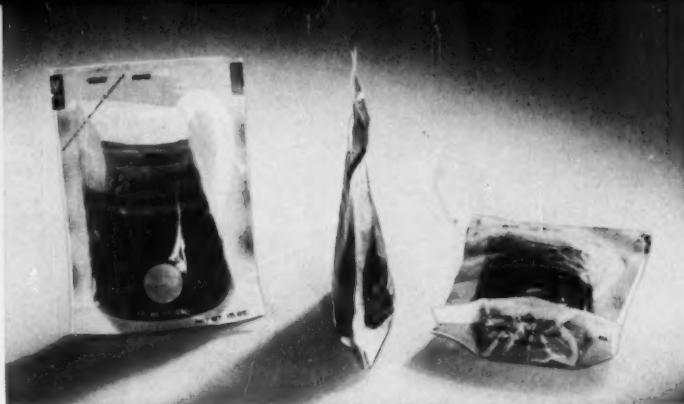
Where different degrees of rigidity are desired, different types of coated papers are employed to provide both the necessary package stiffness and excellent printing surfaces at the lowest cost to the manufacturer.

New laminating techniques enable the manufacturer to use the lighter gauges of aluminum foil in laminated structures in high-speed packaging and still obtain the essential moisture-proof protection. Improved techniques in extrusion coating of flexible materials, including cellophane with polyethylene, adds to the variety of materials available for automatic packaging. In many cases, users report, coated materials work better than laminated combinations when characteristics of the product being packaged are compatible. For example, polyethylene-coated cellophane, still a relative newcomer, combines the best features of both materials for smooth-running, automatic packaging of various chemicals, liquids and vacuumed products.

Outstanding among the newer materials is the team of cellophane and polyethylene. Laminations of these materials are responsible for the



SOY SAUCE for your chop suey, dispensed through a pouring channel provided in polyethylene-coated cellophane envelope. PHOTO, BAKELITE.



AND MAPLE SYRUP for your pancakes from a duplex cellophane envelope that not only looks but acts like a pitcher, thanks to its sealing and printing contours and patented bottom seal that lets it stand up.

bumper crop of new liquid-content packages including sauerkraut, pickles, olives, cherries, window-cleaner solvent and orange juice. The flexible, heat-sealable, chemically inert polyethylene does not impart any taste or odor to the product.

A trail-blazing application was for Pasco's single-service units of frozen orange juice concentrate.¹ The pouch is emptied of its contents at the fountains of Walgreen Drug Stores and reconstituted into a 10-oz. serving of orange juice. Extensive pre-testing showed that polyethylene was ideally suited for the product for the reasons mentioned previously and also because of its low level of water-vapor transmission at subzero temperatures. Cellophane was chosen as the outer layer for its transparency, print-

ability and good machine qualities. Printing is done in reverse on the cellophane, so it is protected within the lamination, free from exposure to the concentrate and from external scuffing.

Manufacturers of a powdered product like Sanalac, a dry milk in 3.5-oz. envelopes making a quart of fluid milk, require a package with a high degree of moisture protection and a strong, siftproof seal. Users are familiar with the difficulties of sealing the end of a package dusted with powder. A lamination of paper to aluminum foil, coated on the inside with an extra-heavy layer of polyethylene, now insures a strong heat seal for the Sanalac package. The polyethylene, with a relatively low melting point, can readily seal through the dust.

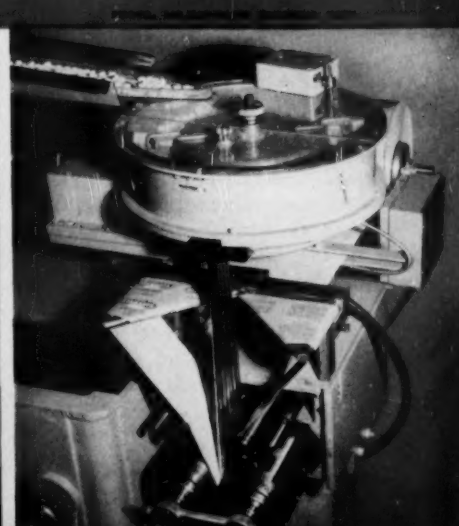
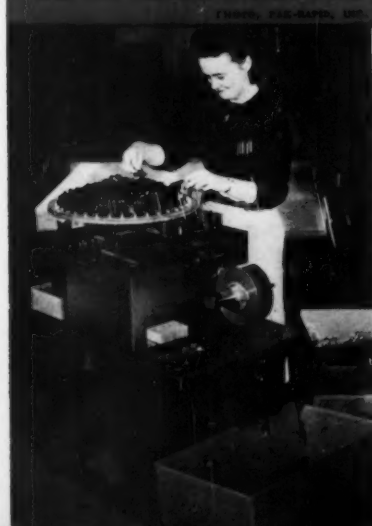
Pliofilm is incorporated in a lam-

inated structure to provide a longer-than-average shelf life for Southern Belle shelled pecans. In another instance, a three-ply lamination of acetate, foil and Pliofilm is giving a life of up to six months for Pream, a highly moisture-sensitive powdered cream. Each Pream package is subjected to an atmosphere of inert gas so that it will have a low oxygen content.

For products requiring steam sterilization, such as surgical dressings, sutures and needles, a lamination of a vinyl film to foil is usually specified. The vinyl films have a higher seal temperature than polyethylene, which might tend to delaminate at the high sterilization temperature. Also excellent for greaseproofness, the vinyls, when laminated either to foil or acetate, are used for hair-cream preparations, certain dry

¹ See "Orange Juice in a Bag," MODERN PACKAGING, Sept., 1952, p. 110.

LOW-COST, IN-PLANT unit packaging of a host of small products is possible with inexpensive strip-packaging machines like these. Machine illustrated at left seals eye droppers individually in cellophane for the Colonial Applicator Co. The machine in the center forms, fills and seals square packets and prints identifying information at same time. Machine at the right seals four Stanback headache tablets per unit on a two-up web at Stanback Co., Ltd.





PHOTO, DOBECKMAN CO.

chemicals as well as for photographic films.

On occasions, the packager is confronted with a special packaging problem for which there is no stock packaging material or materials that will do the job and meet the production budget. An interesting case history is found in a comparatively large 2-by-3½-in. paper-pillow package filled with a ¼-oz. drink mix called Best Aid, produced by the Merley Candy Co., Pasadena, Calif. At the retail sale price of one cent per package, the product had to be packaged at a cost of 85 cents per thousand units.

High machine speed was naturally essential if Best Aid were to be handled at this low figure. However, there was no standard thermoplastic paper coating that would securely seal the dusty powder at the required high speed and short dwell time.

A prominent converter of packaging materials, enlisted to help, surmounted this obstacle with a special

water-emulsion coating applied to the unprinted side of a paper web. A second ½-in.-wide application of the adhesive was printed on the edge of the outside surface to assure a secure seal of the vertical overlap. This idea not only worked out successfully, but is said to have possibilities for many other products. High production speed was achieved with a special rotary machine built to package the product at the production rate of 290 units per minute from two paper webs.

Heat-seal packet papers are available for packaging any number of stable products such as sugar, pepper, salt, tea, pills and seeds, and for efficiency and economy they are in many cases unrivaled.² Some of America's largest soap and detergent manufacturers are packaging single-use or sample sizes of their products in envelopes of super-treated coated-kraft paper.³ The base stock can be

² See "Heat-Seal Packet Papers," MODERN PACKAGING, Aug., 1952, p. 135.

³ See "Packeted Cleansers," MODERN PACKAGING, March, 1951, p. 90.

FOR ETHICAL DRUGS, Ciba uses these various put-ups, which educate the physician and give him trial quantities at same time. Non-trademarked unit doses can be easily torn off.



FOR DETERGENT, Lever Bros. used this double-header package in direct mailer that carried two free dish-washings and a purchase coupon to 4,000,000 housewives. Two contract packagers handled the operation. The pouch is made of polyethylene-coated paper.

FOR QUICK ASSOCIATION with regular retail package, most manufacturers try to make their sample envelopes create a visual image. Those illustrated here are typical.

laminated and coated to meet special requirements of strength and protection.

Improved machinery

Without machines to form and fill at high speeds, labor costs obviously would make unit packaging a prohibitive venture, even with the most inexpensive packaging materials. New types of machines, capable of exceptionally high speeds, are now bringing cost levels within range of practically all manufacturers.

The manufacturer who decides to unit package his product, either as a sample or as a regular sales package, has two alternatives.

He can turn over the product in bulk to a contract packager who will help in the selection of the proper packaging material and run it on one of his machines or, if existing equipment will not handle the job, may engineer a special-purpose machine for handling it.

Or, if packaging a small object or quantity that can easily be fed be-

tween two heat-sealing webs either automatically or semi-automatically, the manufacturer now can purchase any one of a number of standard machines and do the packaging in his own plant.

Some machines for in-plant packaging of this type are surprisingly low in cost and upkeep. As reported earlier,⁴ the Ternstedt Div. of General Motors Corp. semi-automatically wraps automobile hardware parts in individual cellophane envelopes, not for merchandising reasons at all, but strictly to reduce handling costs and to protect parts en route to assembly plants.

Modifications can be made on standard machinery for hard-to-feed products or for other special requirements. A product of Dade Reagents, Inc., Miami, Fla.—Hemolets—used in blood sampling, could not be packaged with the usual heat-seal arrangement. So a specially prepared pressure-sealing paper was selected as the web material. No heat is used to form the packages, but they are later autoclaved to create a sterilized unit.

Whether the manufacturer does his own unit packaging or farms it out may depend upon the shape, size and weight of product, the types of packaging materials employed, speed of operations and quantity required—all balanced against the amount of capital investment necessary.

For a one-time sampling campaign, a manufacturer would most likely turn the work over to the contract packager. Based on their own cost records, manufacturers often find that the contract packager can do many kinds of packaging operations at a lower cost. If the user prefers to do the packaging in his own plant he can lease equipment from some of the contract packagers.

One pioneer contract packager in this field has 15 types of machines to cover the range his customers require and over 100 machines, in all, to meet the terrific production demand of 10,000,000 units in one shift.⁵

Each different product packaged by a company offering this diversified service usually calls for a special feeding throat, sealing dies and folding brackets. These are usually run-tested and properly attached to the

machine to produce packages at high production speeds from the various packaging materials.

In the beginning days of unit packaging, users were content with strips one compartment wide. As long as there are entrepreneurs with the desire to market new products in new ways more convenient for the consumer, there will always be even more versatile kinds of packaging.

So it is with the fabulous unit pack, with pharmaceutical and other users now ordering them in sheets two compartments wide, three wide and four wide, with each compartment holding three, four and even 12 tablets.

Some of the newer machines can select and feed an assortment of items to each pocket and can even alternate assortments in any order.

One of the finest examples of improved mechanical methods of feeding and packaging products in a strip is the new package for Fepileum vitamins distributed by Anabolic Foods, Inc., Glendale, Calif. Not only is a clever type of dispenser carton used, but a morning dose of two tablets and an afternoon dose of two different tablets and one perle—each dose in its own compartment—alternate on the same strip.

Another new machine will simultaneously feed five pockets in a strip alternately with items from five different hoppers. One of the first practical applications is a cellophane tray-service unit for airlines and drive-in restaurants. Instead of cluttering the service tray with one package for sugar, one for salt and so on, the airline hostess or car hop places a cellophane strip of five packets on the tray. It contains perforation-separated compartments of sugar, pepper, salt, toothpicks and chewing gum.

A further refinement in equipment now makes it possible to emboss a code number on each unit package as it is being sealed. Armour Crystar tasteless aspirin for children carries the number on the sealed edge of

AIR-RIFLE LOAD is provided in a measured unit formed of tube-sealed duplex cellophane—just right for a boy's pocket. This illustrates strength of films now available. Dealer receives a reel of 500 units in continuous strip packed in a slot-opening corrugated box.



From bubble bath to B-B's



PHOTO, DORECKEN CO.

BATH FRAGRANCE, for Mom or daughter, is provided by single-use bubble-bath envelopes—practical because of convenience of measured quantity and because product is better protected than in a large container. This illustrates two types—the cellophane tube-seal packet and the foil fin-seal.



PHOTO, GOODYEAR.

HAND LOTION in tiny foil packets dispensed from a catchbook that can be carried in the purse. This was one of earliest examples of liquid unit packaging. It's a lamination of foil and Pliofilm.



PHOTO, DORECKEN CO.

TOOTH POLISHERS, used in dental prophylaxis, are individually sealed in a cellophane tear strip dispensed from hinged openings on both sides of a folding carton. Dentists like this convenience and assurance of sanitation package gives.

⁴ See "Unit Packaged for the Assembly Line," MODERN PACKAGING, June, 1953, p. 126.

⁵ Ivers Lee Co., Newark, N. J.

Five items in one unit



PHOTO, WILLIAM STEVEN CO.

TRAY-SERVICE UNIT for airlines and drive-ins provides sugar, salt, pepper, toothpicks and candy gum, each sealed in perforated compartment of one cellophane envelope. New machine fills items simultaneously from five hoppers.

the packet—no advance printing or hand stamping is required and the record is always there. When unit packages are enclosed in catch covers—a common practice—the code is sometimes embossed on the edge of the cover at the same time that the strip or single packet is sealed in place.

Liquid filling

When satisfactory materials and machinery were developed to handle liquids, a broad new field for unit

packaging was opened. It is, in fact, rated as one of the most promising avenues of growth for the single-service flexible package. Several machinery manufacturers have developed equipment such as that used to handle the Pasco orange juice. In the case of foods, the machine uses much stainless steel and other sanitary materials. Special machines were designed and built for the Pasco application and one,⁶ with an electrical control panel remotely located, makes it possible to steam clean the entire base machine and filler.

The unit package for liquids offers intriguing possibilities for design. Since it is advisable for leakproofness to make the sealed circumference extra wide and restrict the liquid to a center area, it was natural that designers would think of making the sealing dies in such a shape that they would form the product area into a bottle, a pitcher or some other symbol. Printing can help to carry out the idea.

An outstanding example of this kind of imaginativeness is the recently introduced "Pitcher-pour" envelope used by Holbert Bros., Onamia, Minn., for single-service portions of their Holbert's cane-and-maple syrup.

Not only is the laminated cellophane-polyethylene to contain the liquid in the shape of a pitcher, but the envelope has been given an unusual gusseted bottom seal, so that with a little manipulation, giving the syrup a wider base, it can be made to stand intriguingly upright on the

⁶ By Bartelt Engineering Co., Rockford, Ill.

table. Patent is pending on this design, which required only slight modification of a standard liquid unit-packaging machine. A corner tear provides the pouring opening—right at the spout of the pitcher.

A transparent window on an envelope of Vince oxygenating dentifrice is printed in the shape of the bottle and is topped with a printed "cap."

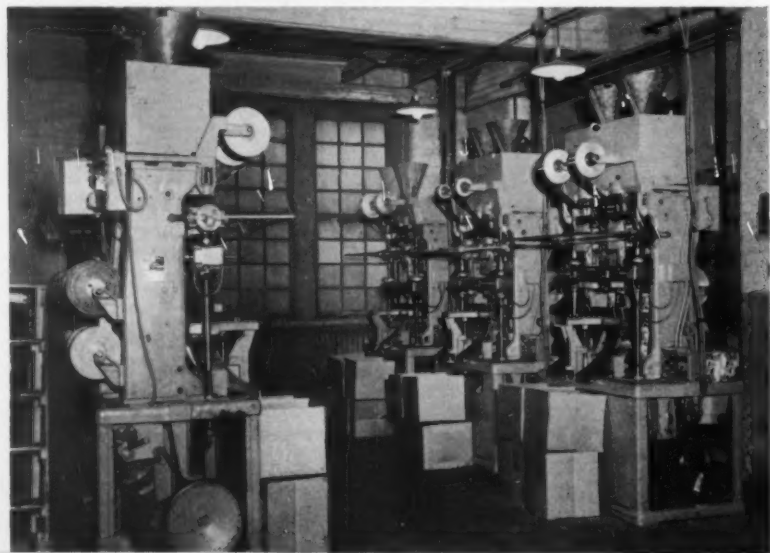
So called "nozzle" and "bottle" packages with a pocket shaped to a small opening are used for other liquids and creams, an example being Ciba's sample package of Pyribenzamine ointment, a product used to alleviate itching. Printing is accurately positioned over the shaped, sealed section, creating a representation of a tube—the type of package in which the product is regularly sold.

A restricted opening is obviously necessary for any liquid product, to prevent accidents when opening.

One authority on unit packaging predicts that many single-use liquid and semi-liquid items now in conventional containers (bottles and cans) will one day be packaged in laminated flexible packages at one-half to one-third the cost. Hesitation on the part of some manufacturers, he says, has been due to the unconventional appearance of these packages and the fear of leakers.

Leakage, however, need not necessarily be a hazard any longer in a properly formed and sealed flexible package. One producer of paint pigments has recently begun shipping them in heavy pouches of laminated cellophane and polyethylene, and reports that so far leakage has been less than formerly experienced with collapsible metal tubes.

A progressive custom packager, with an eye to future markets, recently built an experimental machine that produces a three-cell liquid package between two sheets of aluminum foil laminated to vinyl. As an indication of the possibilities, this type of package is intended to interest a cosmetic manufacturer. The first cell could be filled with $\frac{1}{2}$ oz. of active hair shampoo, the second cell a similar quantity of modified highlight shampoo for the second rinsing and the third cell a cream rinse. Positioned printing and cavity dies could reproduce the label and shape of the manufacturer's present retail package. Cost is estimated at (This article continued on page 206)



PHOTO, STEVEN-WILEY MFG. CO.

CONTRACT PACKAGER, with his batteries of machines adaptable to almost every type of package and material, is often the best bet for unit-of-use packaging, particularly for short runs and sampling.



NEW TEM-TEE LINE is proudly presented to dealers in salesman's corrugated suitcase pack which holds one of each size and style of package. Cellophane, printed in rich color and detail by low-cost flexographic method, replaces waxed paper for carton wrap and is used also for window bags. In foreground, free-sample package for which dealer pays half the cost.

New life for pretzels

Halter's brilliantly printed cellophane overwraps and bags spark a sales upturn

Lent, the traditional time of fasting, usually reflects itself in the business world with a major slump in the sales of what could be called the snack foods—the candies, ice cream and similar products that people “give up” during this observance.

Pretzels, you might think, would not be generally affected, but the fact is that manufacturers of the product are apt to show as much as a 30% drop in sales during the Lenten season—possibly because of the dip in beer and cocktail consumption.

Halter's Pretzels, Inc., Canton, Ohio, one of the six major producers in the industry, had every reason to expect the usual drooping sales curve this year. But it never materialized. Instead, sales of its biggest brand seller, Tem-Tee, were catapulted some 20%.

The only logical explanation: a high-powered merchandising campaign including redesign of the package line and the adoption of brilliant, flexographic-printed cellophane for both carton overwraps and bags. Be-

fore the redesign, only the bags were printed by this process.

Previously a waxed-paper overwrap was used on the Tem-Tee cartons; cellophane bags were used for certain smaller sizes. Basic colors of the package were changed for greater eye appeal. A rather weak brown and white scheme with red lettering was replaced with an exciting red with rich brown lettering. While the same Tem-Tee trademark was kept, the copy was changed to stress serving the new, thin pretzels at TV time and with salads, ice cream and beverages.

The most striking thing about the new cellophane packages is the rich quality and fine detail achieved with flexographic printing. Vignettes on the carton wraps reproduce pretzels and pretzel sticks with tone and texture qualities rivaling those obtained with the more-costly rotogravure process. On the bags, “windows” give a view of the product itself.

Because moisture protection is critical for a product like pretzels, Halter's uses 300 MST cellophane for the

overwraps. The bags, however, are double wall. Halter's combines the printed film with unprinted 300 MST to make its own bags. Even though the product has a surprisingly long-term shelf life, it is speedily delivered to warehouses by Halter's own fleet of trucks and to retail outlets by distributors.

On the carton packages printed cellophane costs the pretzel manufacturer 7% more than the former wax wrap. But since the company believes a better-selling package has been achieved, it gladly chalks the cost up to advertising.

Market studies had convinced Halter's there was no guarantee that a box of Tem-Tees would be displayed in any one way on the grocer's shelf. So that the package might never be at a loss for selling words, fronts and backs of cartons and bags are printed identically.

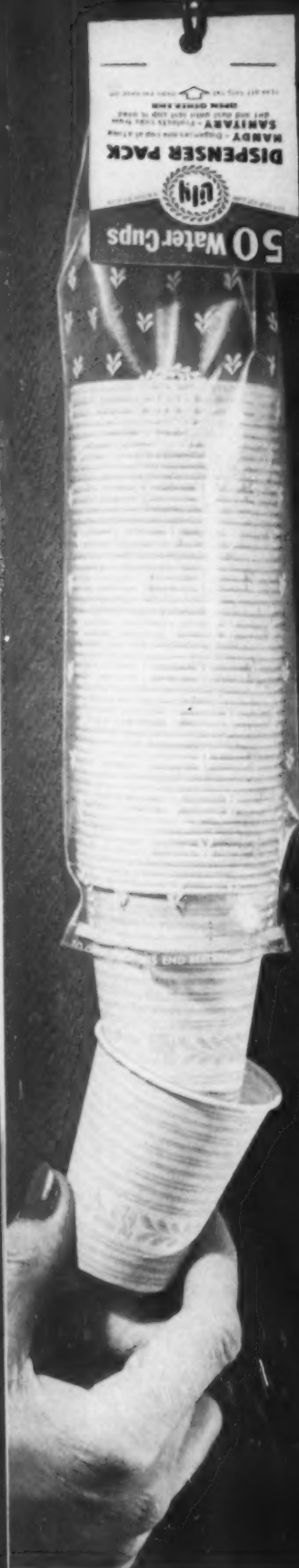
A rush of events followed release of the fresh, new packages. Distributors in the 36 states where this brand is sold stepped up deliveries so fast that Halter's fell behind. One typical distributor, in only 10 working days, moved an unprecedented 10 truckloads or 80,000 lbs. of pretzels. So intense was the demand that the bakery added a third shift.

A coordinated merchandising program backed up the new packages. Each salesman was armed with a colorfully printed suitcase-type corrugated carrying case large enough to hold a sample of each one of the Tem-Tee pretzel packages. Thus the entire line could be unfolded in one showing.

The cellophane-packaged line is complete down to single-pretzel envelopes designed as free samples to shoppers. Believing that dealers would pay more attention to the sampling program if they had a stake in it, Halter's took the unusual step of charging dealers for the samples—at a portion of cost. Together with a carton designed to serve as a counter display for the samples, this policy has been successful in winning prized check-out counter-display spots for Tem-Tee samples.

CREDITS: Printed 300 MST cellophane, The Dobeckmun Co., 3301 Monroe Ave., Cleveland, Ohio. Cellophane, E. I. du Pont de Nemours & Co., Inc., Wilmington 98, Del. Cartons (Kliklok), Robert Gair Co., Inc., 155 E. 44 St., New York 17. Corrugated carrying case for salesman's samples, General Container Corp., Williamson Bldg., Cleveland 14, Ohio.

PINCHING BAG



In the clever arrangement of two opposing spot heat seals on lengths of extruded polyethylene film in tube form, the Lily-Tulip Cup Corp., New York, has found the answer to its long search for a convenient, economical, disposable, one-at-a-time dispenser package for paper cups.

The principle is so simple that it suggests any number of possibilities for application wherever a dispensing feature of this type is desired. For Lily-Tulip, the new dispensers eliminate the need of merchandising permanent-type home dispensing units sold separately—a practice which, the company says, has never been completely successful.

Lily-Tulip's new dispensing packages, which are used for a hang-up package of 50 water cups and for home-use shelf packages of either 15 hot or 25 cold cups are part of an over-all package redesign program which the company has just completed to sharpen up its entire resale line for self-service selling.

The dispensing feature adds little or nothing to the cost of what is otherwise a conventional film bag, made of economical 1½-mil polyethylene. Part way up the bag, or tube, just below the rim of the bottom cup in the nested stack, a slight constriction is formed by a rounded heat seal on each side—just a "pinch" extending no more than ¼ in. in from the edge.

TWO SPOT HEAT SEALS are secret of invention. When placed opposite each other near end of open bag they constrict the bag just enough to permit one cup to be pulled out at a time while others stay put. Stapled die-cut header provides identity and hang-up tab.

When the bottom cup is given a quick pull it readily comes out the bottom of the tube—and the rest of the stack stays put. Apparently the polyethylene film has just enough elasticity to permit the rim of one cup to slide through and then snaps back to hold the remainder at the constriction.

As long as the stack lasts, a new cup is always ready for dispensing. And the remaining cups stay protected from dust and dirt.

The wall-hanger package for water cups is equipped with a stapled, printed paperboard header, perforated so that the trade identity may be torn off, but leaving a die-cut hole on the header for hanging on a nail or hook.

The hang-up package is heat sealed across the bottom. The user merely cuts with a scissors across the bottom end where copy reads: "To open: cut off this end between the printed bands and the dispenser is ready for use."

The polyethylene packages for the 25 cold and 15 hot cups are designed primarily to keep the cups clean and protected on the pantry shelf until they are dispensed conveniently one by one for use. Each package is made of a straight piece of printed polyethylene tubing. After the cups are loaded into it by jig, one end is tucked in over the top of the cups. The other end, above which are the spot heat seals, is drawn through a small hole in the center of a printed paper disk just the right size to fit snugly into the bottom of the last cup in the stack. To open, the user is instructed to pull the "tassel" end, remove the disk by slipping it off—and the cups are ready for removal one

It's a new idea for the simplest kind of dispensing:

Slight heat-sealed constriction in polyethylene-film tube

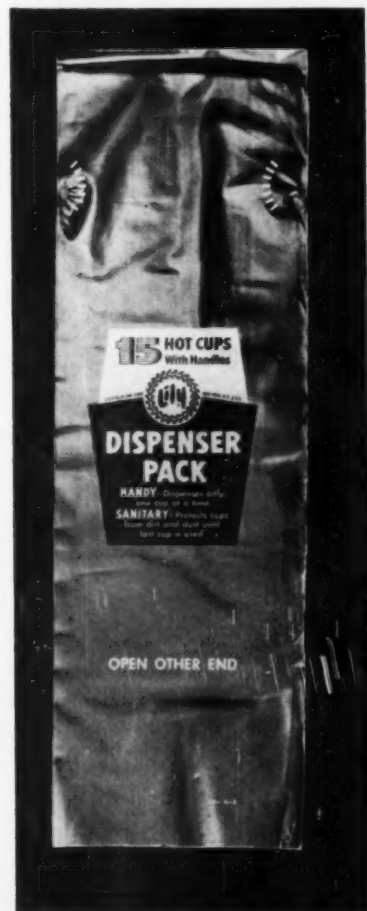
holds stack as cups are withdrawn one at a time

at a time through the open bottom end of the tube. Directions for using the dispenser are printed on the paper disk.

Lily-Tulip's repackaging program includes a complete restyling of product and relabeling to make for quicker recognition and identification of the various items.

The consumer has a choice of four colors in all styles of cups and plates

GUIDE MARKS on empty bag show position of spot heat seals. Apparently polyethylene film has just enough elasticity to permit rim of one cup to slide past seals, then snaps back to hold rest of stack.



HOME SHELF PACK for hot or cold cups, similarly constructed, keeps cups clean and protected until dispensed one by one. Bottom of bag pulled through hole in paper disk that wedges into bottom cup provides secure closure.

which are attractively decorated with a stripe-and-leaf motif. Every cup also now carries a printed designation "hot cup" or "cold cup" as part of the product design.

All hot-cup packages are labeled in a hot color, red, in contrast to a cool color, blue, for packages containing cold cups. Thus, no matter which of the product colors the shopper prefers, she can tell immediately by the color of the labels which are the hot type and which are cold when making her selection in the store and when using the packages in the home.

Another innovation is a new positioning of labels for retail cups so that they are right-side up when the cups

are placed on the store shelf bottoms up, which is the way stores prefer to stack them.

The assortment of new Lily-Tulip resale packages is planned to meet a wide variety of shopping habits, covering different quantities and types of cups all strikingly labeled to emphasize the strengthened Lily-Tulip trademark and to include complete information about contents, the type of cups included and suggested uses.

The smaller packages for quantities of six and 10 cups, either cold or hot, are cellophane wrapped and do not incorporate the polyethylene dispensing feature. They are identified with roll-type, three-color-printed paper



STORE PRACTICE of stacking the cups bottoms up demanded a new style of labeling the packages so that the new labels are seen right-side up.



DRAWSTRING BAG of Pliofilm for 100-cup quantities provides re-usable container.

labels—red, black and silver for hot cups and blue, black and silver for the cold cups.

The polyethylene packages have direct printing on the polyethylene tubing in red and white for hot cups, and blue and white for cold cups. The hang-up dispenser package for 50 water cups has an over-all design printed in white on one side, but is left unprinted on the other so that

the housewife may have either plain or printed side facing out, as she chooses.

Large packages for quantities of 100 cold or 50 hot cups in 6-oz. or 8-oz. size, consisting of four assorted colors—green, yellow, blue and pink—are attractively put up in a re-usable drawstring bag of 1½-mil Pliofilm suitable for re-use for refrigerator storage, or for carrying bathing suits,

picnic lunches, etc. Printing on these bags is in green and white, thus distinguishing them from the other packages in the family.

The troublesome problem of labeling cellophane-wrapped paper plates, which Lily-Tulip has just added to its line, is solved by the use of a die-cut, printed paper label which is folded over the plates before the cellophane wrap is put on. In this way the plates are given strong identity with ample space for informative and selling copy.

The company is presenting its handsome new packaged line at various trade shows and conventions in a canopied display piece which is designed to look like a decorative flower cart.



COLORFUL DISPLAY in form of canopied "flower cart" shows entire Lily Tulip line as it is being presented at trade shows and conventions.

CREDITS: Design program, Lippincott & Margulies, Inc., 500 Fifth Ave., New York 18. Polyethylene dispenser bag developed and printed by Shellmar Betner Division, Continental Can Co., Mt. Vernon, Ohio. Header label for hang-up package, Ever Ready Label Corp., 357 Cortlandt St., Belleville 9, N. J. Paper disks, Paramount Carton Corp., 79-07 Rockaway Beach Blvd., Arverne, N. Y. Drawstring bag, Traver Corp., 358 W. Ontario, Chicago 10, using Goodyear Pliofilm. Paper labels for cups and plates, Oliver Machinery Co., 1025 Clancy Ave., N.E., Grand Rapids 2, Mich. Cellophane wraps, E. I. du Pont de Nemours & Co., Inc., Wilmington 98, Del.; Sylvania Div., American Viscose Corp., 1617 Pennsylvania Blvd., Philadelphia 3, Pa., and Olin Cellophane Div., Ecusta Paper Corp., 655 Madison Ave., New York 21.

Packaging Institute Forum set

Three-day program for 15th annual conference in New York

Oct. 12-14 will provide 13 seminars on top current topics

Significant of the continually broadening scope of packaging activity in modern industry is the extensive variety of the program that will be crammed into the busy three-day schedule of the 15th Annual Forum of the Packaging Institute, which moves this year to a new meeting place at the Hotel Statler, New York, Oct. 12, 13 and 14.

Except for the opening general session, the program is being divided entirely into a series of concurrent seminars, pinpointed to specific technical and production problems to cover the ever-widening range of topics for which the membership has expressed increasing preferences.

In this way it is possible to offer intensive discussion by leaders in each field with more time for individual attention to on-the-spot questions from the audience, according to E. H. Balkema, program chairman. At the same time, with all seminars at the same time and place, those attending the Forum have the benefit of the valuable associations and exchange of ideas always inherent in the meeting of a large group with mutual interests. And every effort has been made to arrange concurrent sessions with minimum conflict.

The general session on Monday morning, Oct. 12, at 10 a.m. will be opened with an address of welcome by Robert de S. Couch, president of the Packaging Institute, and a report by the chairman of the Nominating Committee, Charles O. Kendall of Becton, Dickinson & Co. Mr. Kendall will also serve with present and former PI directors (wearing carnations for identification) as a greeting committee to welcome arriving members and visitors.

Feature speaker of the opening general session at 11 a.m. will be Clarence Francis, chairman of the board of General Foods Corp., who has been asked to "put packaging in its proper perspective for the benefit of top management."

At the first-day luncheon meeting

Walter Williams, Under Secretary of Commerce, will speak.

Specific subjects will be taken up in at least 13 seminars, running as many as four concurrently and several running into more than one session. The seminar on Package Printing is divided into four sessions—one on Monday afternoon, two on Tuesday morning including an entire meeting devoted exclusively to flexographic (aniline) printing and a fourth on Wednesday morning. The two Drug and Pharmaceutical Packaging Seminars will occupy all day Tuesday.

The Monday afternoon program includes seminars on Package Design, Petroleum Products Packaging, Bulk Packaging and the first of the series on Package Printing. The Design Seminar is being set up as a designer-client-production manager panel to show the three-way cooperation needed to produce efficient packages.

The work of the Petroleum Packaging Committee since October, 1952, will be reviewed with an extensive exhibit of simulated wax pallet loads, drums, motor-oil cans, grease cans and export shippers.

Bulk Packaging discussions will touch on many phases of packaging in large containers with particular emphasis on textile bags, multiwall paper bags, fibre drums, steel drums and all types of drum liners.

Among Tuesday morning's concurrent sessions will be the first of two production seminars, a Mechanical Goods seminar devoted to problems of packaging items such as electronic tubes, cash registers, cameras, typewriters and other mechanical equipment weighing up to a ton—and a subject listed as "Packaging as a Profession." Chairman of this panel will be James W. Goff, Michigan State College, where the first full four-year course leading to a bachelor degree in packaging has been established. Typical questions for discussion will be: Is packaging work a career job

or only one step in a man's industrial development? If it is a career, what future does it offer? And what should one study?

Seminars on Package Printing and Package Production will continue on Wednesday morning, at which time there will be two other concurrent sessions: one on "What's New in Packaging Research" and "Quality Control in Packaging," covering such topics as "New Techniques for the Packaging Engineer," "Maintaining Proper Packaging Specifications" and "Quality Control in Relation to Incentive Systems."

During the final afternoon, Wednesday, there will be meetings of the Adhesion and Set-Up Box Committees to explore subject interest in this field. The afternoon is also reserved for meetings of numerous other technical committees to be announced later.

In addition to the opening-day luncheon, there will be a luncheon meeting at 1 p.m. on Wednesday at which J. Frank Stephenson, general manager of Kraft Containers, Ltd., will speak on "Pack for Less," reported to be a "constructive, but humorous critique of over-packaging as done in North America with examples of packages that could be made less expensive but perform equally well."

The social occasion of the Forum will be a cocktail party and buffet supper from 5 to 7:30 p.m. Tuesday.

All sessions and functions of the Forum are open to non-members as well as members of the Institute on payment of a registration fee. Employees of member companies, however, are offered a more advantageous rate than non-members. Advance registration by mail, to Packaging Institute headquarters at 342 Madison Ave., New York, assures a badge ready for pick up with no waiting at the registration desk on arrival. The Hotel Statler has set aside rooms which may be reserved by mail.



PACKAGED

Comes now the handy, effective, one-minute shoe shine—thanks to imaginative packaging.

It's the latest innovation in the growing trend to unit packages which perform a single, functional job and are then discarded. A natural for vacationists, traveling men and busy office workers who don't always have the time for today's high-priced professional shines, the Goldie Shine, developed by the Gold Seal Co., Bismarck, N.D.—the originators of Glass Wax—is built around a gelatin capsule containing a measured quantity of high-quality shoe polish in one of three colors—brown, black or neutral. In addition, the package itself, a combination of polyethylene film and printed, heat-sealing, non-woven cellulose textile, serves as a combination shoe duster, polish applicator and buffer. Six of the easy-to-use, conveniently disposable packages come in a printed folding carton.

The accompanying photographs illustrate how the Goldie Shine package works. The user first slips four fingers, palm side up, into the polyethylene-lined envelope and uses the

textile flap labeled "duster" to wipe off any dust or dirt on his shoes. The short duster flap, which is crimped and heat sealed to the rest of the package at the sides and bottom, is then torn off and discarded, leaving a clean surface marked "buffer" for Step No. 3. In Step No. 2—the sequence of steps is clearly marked on the package—the mitt is reversed on the hand and the inner capsule is pressed against the shoe, releasing the polish and causing it to saturate the cloth applicator surface. The inner lining of polyethylene prevents the polish from bleeding through to the inside of the package and soiling the fingers. After the polish has been applied to the shoes, the mitt-type package is again reversed for polishing with the unsoiled buffer back.

The success of this new-type package, now being test marketed in the Chicago area, hinges upon the functional application of the tough, absorbent, non-woven cellulose textile, used in combination with the plastic inner liner which gives the package added mechanical strength and also confines the release of the polish to

one side of the package. The fact that the unique package makes it possible to obtain a quick and lasting shoe shine without so much as soiling a finger makes the product particularly attractive to salesmen, office workers and busy housewives. The packages also fit into the purse, traveling bag or auto glove compartment.

The color of the polish—neutral, brown or black—is printed on each envelope and also on the principal display panel and opening flap of the six-shine carton. On each carton the large shoe illustration dominating the display panel is printed to match the shine color, providing a further safeguard against selection errors. Also highlighted on this panel is a hand holding one of the mitts, with a flap laid back to show the inner capsule of polish. The product name, in red capital letters, appears on all six surfaces of the outer package, which also features the Gold Seal trademark.

The back panel describes and illustrates the three easy steps for dusting, polishing and shining shoes, together with a blurb reminding the user that "the plastic liner protects

ONE-MINUTE SHINE is explained in three easy steps on surface of pack, which is made of non-woven, heat-sealable textile, lined with polyethylene. Gelatin capsule of polish under surface side is crushed and wiped on shoe; reverse side, as shown here, is for dusting and buffing.

your hands while you shine your shoes!"

Step-by-step instructions for use of the product are also clearly printed in red, yellow and blue directly on each applicator-mitt package. The instructions are so concise and explicit that anyone who can read should be able to obtain a good shine without difficulty. The rear surface of the envelope, for example, has an arrow near the top, indicating where the fingers are inserted for the preliminary dusting operation. When the directions are followed correctly, this automatically keeps the color capsule behind the fingers, insuring that its contents are not released until the mitt is reversed in Step 2.

The Goldie Shine package—whose construction immediately suggests its possible use for other products such as cleaning fluid, furniture polish, sun-tan oils, cleansing creams, etc.—is fabricated on two specially adapted automatic units, each of which makes up the bags from two preprinted rolls of the non-woven heat-sealable cellulose and one roll of polyethylene film. These machines fold and heat-seal the three closed edges of the package and insert the color capsule in such a manner that it is sealed off from the inside of the package by means of the folded polyethylene liner. The complete individual packs are automatically fabricated on the sealing and cut-off equipment prior to the intro-

duction of the capsule, which is then sealed in place.

The final step in the packaging operation consists of the manual packing of six of the envelopes in the printed outer cartons. With present equipment facilities, the individual shoe packs can be turned out at speeds as high as 90 to 100 units per minute. The various packaging processes and designs involved in the Goldie Shine are covered by patents applied for by the Gold Seal Co.

CREDITS: Non-woven cellulose fabric and polyethylene film, The Visking Corp., 6733 W. 65 St., Chicago 38; polyethylene film also by E. I. du Pont de Nemours & Co., Inc., Wilmington, Del. Gelatin capsules of polish supplied by R. P. Scherer Corp., 9425 Grinnell Ave., Detroit. Non-woven fabric printed by Kleerwrap, Inc., Hawley & Chicago Sts., Mundelein, Ill. Folding cartons for six individual units, Waldorf Paper Products Co., 2250 Wabash Ave., St. Paul 5, Minn. Equipment for fabricating individual packages and inserting capsules, Bartelt Engineering Co., 1900 Harrison Ave., Rockford, Ill. Case sealer, J. L. Ferguson Co., Route 52 at Republic Ave., Joliet, Ill.

SHOE SHINE

The Glass Wax people have
done it with non-woven fabric,
polyethylene film and polish
in a gelatin capsule



PHOTO, BARTELT ENGINEERING CO.

CONSTRUCTION of envelope is shown here, together with front and back of six-pack carton. Note preliminary duster flap that is torn off after use, as at right, and discarded. Polyethylene liner keeps the user's hand free of dirt or polish.

PRODUCTION is continuous, on two machines (background) that feed polish capsules into webs of polyethylene and printed non-woven textile, form envelopes, seal them and cut them off.



FIFTY-SIXTH OF A SERIES

SHULTON'S

Old Spice

FOR MEN

Although he would be the last to admit it, the average American male actually uses more perfumery today than the ladies.

The \$26,000,000 spent annually for after-shave lotions—which, cosmetically speaking, are classed as fragrance preparations—is bigger than the total spent for perfumes and 60% as big as the expenditure for feminine toilet waters and colognes. And if the market were measured in gallons instead of dollars, the after-shave lotion market would be the largest single fragrance market in existence.

The annual market for all men's shaving products is well over a quarter of a billion dollars—more than one

fourth of the entire billion-dollar cosmetic industry. This does not include hair preparations nor the growing market for men's deodorants.

And the largest-selling shave lotion in American drug and department stores today, in both dollar volume and quantity, is Shulton's Old Spice. Furthermore, according to independent research, the complete line of Old Spice for Men packages is the largest-selling line of men's toiletries in the country, accounts for more than 50% of all Christmas business in men's toiletries and rings up sales of more men's "set" packages than any other brand of masculine grooming aids in its field throughout the world.

This conspicuous and continued success alone entitles Old Spice for Men to nomination for a place in *Packaging's Hall of Fame* as the leader in its field. But its influence—on the toiletry and cosmetic field in particular and packaging in general—goes deeper than that.

Introduced in 1938, at a time when the mere mention of "men's cologne" was a signal for loud guffaws, Old Spice demonstrated how simplicity, good taste and strong masculine appeal in packaging could build a world market for quality men's products in the dollar-and-up price bracket.

By going deep into American history for containers that would look like hand-made pottery and hand-made boxes, Shulton did more than any other brand in its field to prove that the charm of antique hand-craft can be adapted to modern high-speed package production.

By creating, through packaging, an atmosphere of the days of sailing ships and colonial culture, Old Spice pointed out the promotional possibilities of packaging based on topical interest. It appeared at a time when the Rockefeller restoration of Williamsburg had focused interest on colonial reproductions of everything from furniture to ship models.

Old Spice for Men is a striking example of the use of the gift package usually bought by women for their men—to attract steady users. Shulton has stood back of the packages with quality products to hold these customers. Its gift packaging has been used thus not merely to catch initial gift sales, but to build sound, regular, year-round, repeat business.

Despite soaring costs, Shulton has never deviated from its policy of quality products in package units in



ORIGINAL LINE of Early American Old Spice for women paved the way for Old Spice for Men, introduced a year later in 1938. This cabinet floor stand featuring both lines was a winner in MODERN PACKAGING's 1940 All-America Packaging Competition.

NOMINATED TO PACKAGING'S HALL OF FAME BECAUSE:

- It rose from nothing overnight to become, almost solely on the appeal of its packages, the leader in its field.
- It was instrumental in creating a market for quality men's toiletries which, in sheer bulk, is now bigger than its feminine counterpart.
- With its Americana motif, it helped turn all cosmetic packaging into fresh new channels of artistic appeal.
- More than any other company, Shulton has demonstrated how hand craftsmanship can be adapted to modern, mass-production packaging.

the price bracket that connotes quality and still is not too high to catch a mass market. Shaving lotion and men's cologne are still maintained at their original \$1 retail price. Shulton's continuing study of more efficient methods of production and packaging has kept costs in check.

The company is an enthusiastic user of plastics and claims to have been first in the toiletries industry to replace cork stoppers with polyethylene, using the new plastic in the shroud-and-pintle closure assembly on its men's shave lotion, men's cologne and talcum bottles. Some of the most elegant plastic containers ever adopted commercially were the hand-carved pink translucent phenolic containers used prewar for Shulton's "Desert Flower" women's line. And today, in its own plant, the company is doing some of the most intricate injection molding jobs with polyethylene to produce the delicate, lacy "baskets" which fit over plastic containers for women's stick cologne and decorative floral bases for perfume.

The Shulton men's line has been singled out for *Hall of Fame* honors because its leadership in that field is so outstanding, but the company's great ingeniousness and resourcefulness in packaging are reflected also in the three women's lines, which cannot help but be a part of this story.

The packaging of toiletries is like the show business, or like the publishing of novels or songs. It takes a sixth sense to know what will click. Shulton, Inc., which started as a private-label soap house, introduced its feminine line of Early American Old Spice in 1937, in packages that marked the first clean break with the tradition of French-inspired perfumery packaging and proved conclu-



FAMOUS SHIP REPLICAS on shaving mug and pottery-glass bottles create the promotional atmosphere and strong masculine appeal that continue to sell millions. After-shave lotion is leader of the line, which today includes five ways to shave (soap, brushless, lather, stick, aerosol), plus cologne, talcum, deodorant and bath soap, all sold individually or in boxed combinations.

sively that Americans would buy quality, American-made fragrance products. Shulton's success with the American theme has been an influence on the entire toiletries and cosmetics industry away from extravagant frou-frou toward simpler design more in keeping with the times.

Old Spice for Men came into being the following year, 1938, as a companion line. The colonial art of early America provided an appropriate atmosphere for shaving soap, in a reproduction of an old shaving mug, and for shave lotion, men's cologne and talc in pottery bottles designed after an old ceramic medicine jar and decorated with fired-on illustrations of famous 18th century sailing ships: "The Friendship," "The Mount Vernon," "The Recovery" and "The Grand Turk." The appeal of the packages as gift items was so great that

by 1939 the men's line was outdistancing the women's items and accounting for 22% of the company's gross. Its success was perhaps even a little surprising to William Lightfoot Schultz, late president and founder of Shulton, Inc.

Mr. Schultz had been in the soap business since 1910. In 1933 he sold his Lightfoot Schultz business to the American Safety Razor Co. Like everyone in the toiletries business, he was continually hunting for the idea that would hit the big time.

Descended from early American settlers and having begun his career with a Philadelphia firm of interior decorators, he had acquired a lively enthusiasm for colonial crafts.

It was perhaps natural that the country's growing awareness of its past would lead him to the use of the Early American theme in packag-

Evolution of package designs



DESIGN INSPIRATION was a colonial pottery medicine jar (far left). Practical shape was developed from wood-turned models. First Old Spice pottery container is shown at left of today's glass container, which duplicates appearance of pottery, but can be made to close tolerances demanded for mechanical packaging. Dummy of original box shows use of wood-veneer box covering.

ing. Also he had as his art director at that time Mrs. Enid Edson, a New England girl from Lynn, Mass. Through her research in museums and antique shops, and Mr. Schultz's conviction that the time was ripe for a design excursion into Americana, the packaging ideas grew.

On a June day in 1937 Mr. Schultz started across the country with five pieces of cardboard. On them were pasted wood-veneer cut-outs of boxes for powder, soap and bottles of perfume and toilet water.

The wood veneer was decorated with stiff little sprays of green, red, blue and yellow flowers. In the open spaces languished a prim colonial lady in a red-striped skirt, inspired by a design figure in the famous Caswell carpet, embroidered more than a hundred years ago by a young woman in Castleton, Vt., and now in the Metropolitan Museum. Sketches of open boxes revealed linings designed with red stars and gold dots like those on old wallpapers. Some of the boxes appeared to have mirrors inside the lids like old-fashioned trinket boxes. The suggested bottles were to be machine-made adapta-

tions of the famous hand-blown and hand-decorated 18th century bottles which were designed by William Henry Stiegel.

From New York to Los Angeles, Mr. Schultz placed these sketches on the desks of toiletries buyers—desks that glittered with gaudy curlicues and baubles of foreign inspiration. He was not selling toiletries; he was an old and respected hand at that business and he did not have to point out that the products he would put in the boxes would be good. Buyers who

knew him took quality for granted. He was selling packaging.

Quaintly, he labeled the new line—on the bottom where the name would be inconspicuous—"Early American Old Spice" because, as he said, "Women do not enjoy making their dressing tables an advertising stand for a perfumer." The time had come, he declared, to break away from the European tradition and live with our own great American heritage. And he had the audacity to predict that this line—which until then was only a packaging idea—would sweep the country.

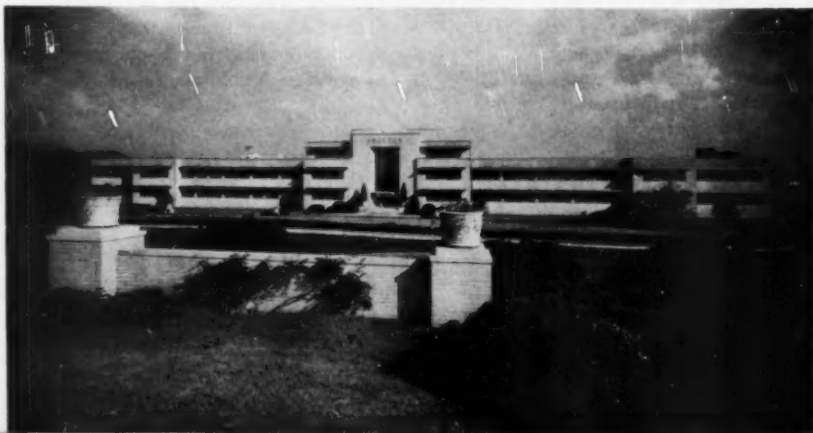
Solely on the appeal of the package sketches he returned to New York with \$50,000 in orders from 28 department stores. The first Old Spice toiletries for women were sold only in the last four months of 1937. Most of the original accounts sold out at once and clamored for more. The first year's gross was \$80,000. By 1939, with the men's line accounting for 22% of the total, sales were reported at more than \$3,000,000.

MODERN PACKAGING took note of this rising new star in cosmetic package design as early as its July, 1938, issue. A lead article in that issue* pointed out that Shulton's Old Spice—then only a year old—was "taking exception after exception to many of the trade shibboleths in the cosmetic industry" and presenting "a sharp contrast with the majority of newly introduced packages in the toilet goods field."

"This very element of contrast," MODERN PACKAGING said, "seems to have struck a note of wide acceptance among toiletry consumers who seem to relish something a bit old fashioned in a world increasingly dominated by

* See "A New Note in Toiletries," MODERN PACKAGING, July, 1938, p. 21.

MODERN PLANT is an industrial showplace in Clifton, N. J., where Shulton is equipped to make most of the materials that go into the production of its products, as well as to produce much of its packaging.



tear-drop curves and chromium plating."

In 1940 a feminine line of Southern inspiration called "Friendship's Garden" complemented the Early American with its New England tradition, and the first "Desert Flower" in the plastic containers in 1941 brought in a theme from the Southwest. Since 1940 the business has increased manyfold and, according to George L. Schultz, son of the founder now president, volume has doubled since 1946. The volume turned out is indicated by the fact that the after-shave lotion—the leading product—is produced at the rate of 50,000 of the 4-oz. bottles in an 8-hr. shift, while total production of all lines in the company's beautiful modern plant at Clifton, N.J., is in the neighborhood of 100,000 package units per average day.

In the beginning all boxes were hand made in a small box-maker's plant on Manhattan. Box covering was an actual wood veneer, hand made in Japan and printed sheet by sheet on a small letterpress. Registration on the veneer sheet was a difficult problem but, says A. J. Grodin, present Shulton art director who was there at the beginning as an assistant, "We found when it was slightly off register, it looked even more like the hand-painted effect we were trying to reproduce."

The war cut off the supply of wood veneer from Japan and the company had to search for something else. For the men's line, the antique effect was maintained by the use of a printed and embossed paper, of American make, simulating antique book leather.

The original shaving mug and the bottles for shave lotion, talc and cologne were pottery, hand decorated

before firing. They were so authentic looking that even these modern reproductions have been found around the country in antique shops.

When the demand for shave lotion and talc rose to millions of bottles, the company was forced to adopt automatic filling and closing operations and had to give up the ceramic containers. Both the pottery supplier and Shulton were glad to see the day when the company adopted what it calls its "pottery-glass" bottles. To the pottery firm, the control of capacity and neck tolerances to the specifications Shulton demanded for machine production was an almost impossible feat and eventually a profitless operation. To Shulton, the percentage of leakers, the porosity of the pottery and the inaccurate fills due to the irregularities of the containers made handling and costs for the pottery containers prohibitive on a large-volume basis.

Shulton's "pottery-glass" bottles, actually, are similar to opal glass, but manufactured in a clay color with a lustre so close to that of the real pottery formerly used that it is difficult to tell the difference. Developing the bottles required months of painstaking research and thousands of dollars investment to determine the type of ceramic materials that had to be added to the glass to give the realistic effect of pottery.

The bottles for the men's Old Spice liquid and powder products are of a similar design, differing only in the dimensions of the neck finish. A wider mouth is used for the powder bottles to permit easier filling. All are equipped with shroud-and-pintle type of dispenser closure. The present assembly consists of a polyethylene stopper, an aluminum shroud and a melamine-plastic pintle. Much study

has been given to the improvement of materials for this assembly since the original one, which was comprised of a tin shroud and pintle with cork stopper. Metal research determined that an aluminum shroud was most resistant to corrosion. The melamine pintle is also unaffected by product ingredients. The polyethylene stopper, designed and made by the company's own plastic division, was adopted in 1947 to replace cork. The polyethylene not only provides a tighter seal, but is resistant to bacterial growth and will not chip off into the product.

The Old Spice bottles are filled automatically at speeds up to 130 per minute.

At present the stopper and shroud are hand placed in the bottles, but automatically seated and reamed. In accordance with Shulton's policy to mechanize as volume demands, the company expects within a few months to apply the closure assembly completely automatically.

In fact, it is this constant endeavor to match production techniques to market expansion that has been one of Shulton's main sources of strength and has led to the building of the company's advanced new plant. Completed in Clifton, N.J., in 1947, it was a dream which William L. Schultz saw come true before his death in 1950. The plant is a showplace of modern manufacturing on a 33-acre landscaped site.

Shulton is one of the few toiletry manufacturers equipped to make most of the materials which go into its products and packaging, including all of its own boxes. In its plastics division the company molds and fabricates the plastic containers for its shave stick, most of its plastic caps, stoppers and decorative elements,

SHAVE-LOTION LINE can fill and carton automatically upward of 50,000 bottles a day. Pottery-glass bottle that replaced pottery containers made these high speeds possible.



BOX MAKING is straight-line production. As made, boxes go by chute to packaging department. Exact quantities are made as needed, thus there is no problem of over or under ordering.





1937 SKETCHES which William Lightfoot Schultz laid before toiletries buyers across the country. With nothing more tangible to show, he returned with \$50,000 in orders from 28 department stores.

even to the making of molds in its own machine shop.

The box division has equipment for the making of all types of set-up boxes: square, rectangular, hexagonal, round, cylindrical. Only folding boxes are purchased prefabricated.

By having such facilities in a business where packaging volume is often and unpredictably variable, the company feels that it eliminates several problems. When a new item is introduced, it is often difficult to determine in advance what initial quantities of boxes are required. Where outside purchasing must be done, a larger quantity than may be needed often has to be purchased in order to interest a box maker in the order, the company says. At Shulton, where box making is practically continuous with the packaging operations, just the right quantity of boxes can be turned out and the production of any box stopped immediately when no more are required. There is no waste and, with box production synchronized to output of the packaging lines, there is no problem of storage or timing of shipments. Boxes are made on an upper floor. As completed, they go directly by power chutes to the packaging lines where women operators fill them with products. For Shulton's wide line of set combinations, this is a very efficient procedure.

With its own plastics division, the

**Package ideas
came boldly
from American
History**



CARPET from Metropolitan Museum provided lady in red-striped skirt and little flower motifs.



HAND-BLOWN GLASS BOTTLES, designed by William Henry Stiegel before the Revolutionary War, were to be reproduced for the Shulton containers. These 18th century bottles are hand decorated.



ON THE MARKET, the packages, within a period of only a year, were the sensation of the cosmetic industry. Some said, "A novelty that won't last," but here they are, today's version, holding their own and sharing honors with the even more successful Shulton's men's line.

company feels that it is in a position to do the kind of design and development engineering that keeps it just a little ahead of others in an industry where every idea is keenly competitive and where the early start is extremely important to promotion and sales.

Through the work of this division, the company was one of the first to replace ground-glass stoppers in perfume bottles with polyethylene. The company is particularly proud of its decorative "basket" injection molded of polyethylene used on its women's stick-cologne package. The intricacy of the design demanded deep undercutting of the mold cavities. Shulton has been able to produce this item without damage to the delicate, lacy design in the removal from the mold.

The wide variety of packaging required for Shulton's Old Spice for Men is dictated by the types of products in the line. The leaders, in addition to after-shave lotion in the pottery-glass bottle, are men's cologne and men's talcum in similar containers, boxed men's soap and stick deodorant in glass. Five other basic products represent five ways to shave: shaving soap in a shaving mug, brushless shaving cream and lather shaving cream in collapsible tubes; stick shave in a urea plastic container and—the latest addition—"Smooth Shave" in an aerosol can. Each of these items is packaged for individual sale and in addition is put up in a dozen or more gift combinations in the company-made set-up boxes covered with antique embossed leather-grained paper decorated with sailing-ship motifs and lined with bright red paper.

Wherever mechanization can be used to effect production savings, it has been adopted in Shulton's plant. All bottles are automatically filled. Faster equipment has recently been installed for filling products into collapsible tubes.

An interesting device that saves endless time is used for applying a piece of pressure-sensitive tape on each side of the shaving mug to secure the formed transparent acetate cover which fits over the top of the mug.

Much attention is paid to time and motion studies to save needless labor and to simplify workers' jobs. Automatic cartoning of the shave-lotion bottles has permitted a reduction in the number of girls working on the

line from 38 to 14, yet not one girl has lost her job due to this mechanization; it merely meant releasing 24 workers for operations for other products in line with continually expanding business.

Shulton's aerosol line is one of the first of its kind. Freon propellant is loaded into the containers by means of a new pressure filler which eliminates the need of performing this operation in a refrigerated room. Shulton reports that it is filling at the rate of about 40 cans per minute with a gas loss of less than 2% and expects to reduce this to less than 1%. The pressure filler, which operates semi-automatically and is suitable for foam-type products, takes up only a few cubic feet of plant space.

Shulton's Smooth Shave aerosol also has an interesting, company-designed, knurled valve closure of polyethylene to unlock and regulate the



HAND-ETCHED bottles are used for all of today's "Desert Flower" toilet water and perfume. Skillful molding produces "lacy" basket of polyethylene.



PIONEER PLASTIC packages were Shulton's original hand-carved phenolic containers for "Desert Flower," among the most elegant in the cosmetics field. Material shortages, unfortunately, made them a war casualty.

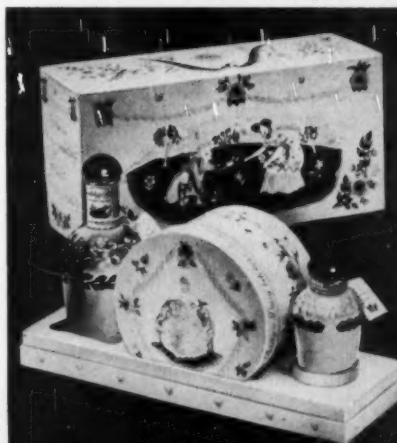


flow, thereby making the package safe for travel carrying without the need of a separate domed guard over the valve.

Advertising and promotion

From the beginning Old Spice packaging has been supported by strong advertising. The first place William Schultz went after he had booked his first orders was to his advertising agency, The Wesley Associates, which still handles all Shulton's advertising. He planned an expenditure of \$30,000 in *Vogue* and *Harper's Bazaar* the first year for Early American Old Spice. Shulton today is listed among the top 100 newspaper (This article continued on page 203)

A SOUTHERN THEME used for the packaging of Friendship's Garden line, another of the four major fragrance lines which have helped build the Shulton success story in the short space of 16 years.





PACKAGES for ready-to-serve salads and desserts are printed paraffined cups with snap-in cellophane-windowed lids. Only the lids distinguish the type of salad or dessert.

SALAD BY MACHINE

Increasing popularity of pre-packaged delicatessen items leads National Tea to an automatic filler and liddler

Whipping up a tasty salad at home may soon become a lost art. In a steadily increasing number of supermarkets and other retail food outlets, today's housewife can purchase attractively packaged, ready-prepared fresh salads as well as gelatin-type desserts from the refrigerated dairy-products self-service case. This new merchandising approach enables her to give her family and guests greater variety and also eliminates the time-consuming preparation associated with most types of salads.

National Tea Co., Chicago, was among the earliest food organizations to visualize the sales potential of pre-

packaged salads and gelatin-type desserts. During the World War II period, National began putting up several such products, packing them by hand in paraffined paper containers with snap-in lids. Previously, salads had been packaged as a bulk item only, requiring further preparation to get them ready for the table.

Experience soon proved that hand filling and closing of the new-type package were inadequate to meet the requirements of large-scale operation. It was difficult to maintain accurate weight control of the finished packages. Furthermore, many of them had a messy appearance resulting from

overfilling or spillage. Production also suffered because a disproportionate share of worker time had to be devoted to packaging rather than to preparation of the salads.

In an effort to step up the efficiency of the packaging operation so that increased output of these products could be made available for distribution in the Chicago area, Carl F. Ohlson, production manager for National Tea Co., explored the possibility of mechanization. He found that a type of automatic filling machine which had been expressly designed for packaging cottage cheese in waxed paper cups and other styles of con-

tainers could be successfully utilized for handling ready-prepared salads and gelatin desserts.

As a result of the ensuing installation, National is now getting approximately 10 times as much production as was formerly obtained with the manual packaging method. This has been accomplished without increasing the number of workers involved and has enabled National to make more productive use of their efforts. In addition, mechanization has resulted in much neater, cleaner packages and provides accurate product weights without supplementary check weighing.

The development should have widespread interest among food-store pre-packagers, to whom delicatessen items are becoming increasingly important.

Located at National's big warehouse and plant in Chicago, the new installation is extremely versatile, handling two sizes of cup-type paper containers—12 oz. and 4 oz.—and a variety of products. Among the types of salads being filled on this equipment are potato salad, cole slaw, macaroni, red kidney bean and Waldorf salad. All of these are packed in the 12-oz. cups; for the potato salad, however, net weight runs 13 oz. instead of 12. The gelatin desserts handled include pineapple, peach, pear, fruit mix and cherry flavor with fruit mix. These are packed in the 12-oz. cups and also in convenient single-portion 4-oz. cups. All the products are capped with tight-fitting die-cut lids having a cellophane window through which the food may be clearly seen by prospective buyers. Finger tabs on the 12-oz. lids facilitate their removal from the containers.

All the cup-type containers are printed in blue against a light orange background. They feature repetition of the National Maid trademark around the upper edge and the company name around the base, in white lettering against a blue band.

On some of the heavier-volume items, such as potato salad, the specific product name is preprinted on the lid, along with the National Maid trademark and the net-weight and price panels. For certain other products the lids are supplied with an additional open panel on which the required product name is imprinted by means of a rubber stamp at the National plant. This arrangement simpli-

fies the inventory problem and insures that correctly identified lids are always available for the type of salad or dessert being packed. Printed panels on the side of each container read, "Ready to serve salads" and "Prepared gelatin desserts," making them adaptable to either class of product.

The packaging installation for the salads and desserts takes up relatively little space in the National Tea salad department. Mounted on casters, the filling machine and its cup dispensing and capping units occupy a floor area measuring approximately 6 by 5 ft. in size. Cookers, vegetable peelers, mixing bowls and other processing equipment are ranged in convenient relationship to the filling unit.

In operation, the packaging equipment automatically feeds the cups singly from a stack onto a short conveyor, fills each container to the proper level as it stops beneath the filling spout and moves the filled containers on to the capper, where the lids are automatically applied. This complete operation, including automatic code dating on the bottom of the cups, is performed at a rate of 20 to 25 of the 12-oz. containers per minute. Uninterrupted operation may be maintained as long as completed

batches of salad are transferred into the 20-gal. stainless steel hopper of the filling machine.

All parts of the unit which come into contact with the food are of solid stainless steel or nickel alloy. If required, the amount of product being dispensed on each fill can be adjusted while the machine is in operation by means of a simple hand-wheel control.

As each container is filled, it is automatically elevated so that the bottom of the cup is in close proximity to the filling spout. This action prevents bubbles or pockets and insures a solid pack. In filling the salad products, a special type of tapered nozzle is used which provides more uniform discharge and more accurate weight control. The filling machine has a no-container, no-fill arrangement which insures against discharge of product unless a container is correctly positioned beneath the spout.

When the packaging set-up is changed over from 12-oz. to 4-oz. containers, a smaller filling spout is substituted and other machine adjustments quickly made. Magazines of proper size for the 4-oz. cups and their matching lids are also mounted (This article continued on page 218)

MACHINE feeds cups from stack at right, fills them and applies lids. Each cup is elevated into nozzle to prevent air bubbles and insure a solid pack. Both the 12-oz. and 4-oz. containers are handled on this new machine, at a speed of from 20 to 25 per minute—10 times the former manual speed.





Personalized champagne

Your wedding invitation reproduced on a champagne bottle label is the novel packaging idea the San Martin Vineyards Co. is using for a California product called Wedding Day Champagne. The distinctive personalized package makes an ideal gift for the bridal couple, combining as it does the traditional wedding beverage with a reproduction of their own wedding invitation. A regular 4/5-qt. sparkling wine bottle is used.

A special packet obtained from the liquor dealer contains a data card and a number of labels printed except for the wedding announcement. These are taken to the printer, who prints the labels at the same time he runs the formal announcements. When completed, they are mailed with the filled-in data card to the dealer, who puts the labels on as many bottles as are ordered.

CREDITS: Bottles, Owens-Illinois Glass Co., Toledo. Labels, Louis Roesch Co., San Francisco. Neck hoods, Berkeley Yeast Laboratory, Berkeley, Calif.

New tricks for transparent acetate and paperboard



In its new gift packaging of brushes, combs and mirrors, the Empire Brush Co. has used some interesting new constructions. Several of the boxes are made of drawn transparent acetate with recessed bases to hold the product. The unusual touch is the way a decorative rose or tiny floral spray has been secured under a domed piece of transparent acetate on the box covers to add color and a softer look to the packages. By clever printing, die cutting and scoring paperboard in the form of animals and combining them with formed acetate, the company presents a new idea in packaging with child appeal. The transparent acetate forms the body of the animal and at the same time the container for the merchandise which is completely visible to the customer.

A third construction is a paperboard package for a boy's comb and brush printed, die cut, scored and glued to make a cowboy gun holster.

CREDIT: Boxes, Shaw-Randall Co., Inc., Pawtucket, R. I.

Design

Pocket mint dispenser

From Austria comes a new method of merchandising mints in a tiny automatic pocket dispenser with refill packages. Made of polystyrene, the dispenser for Pez candy tablets in peppermint and other flavors, now being made in the United States, works something like a cigarette lighter. A flick of the thumb releases just one Pez tablet, ready to eat, by a spring mechanism similar to that in a desk stapling device. The dispensers come in a variety of popular shades to blend with costume colors.

Reloading is simple, the refill package being inserted at one time without touching the tablets. The dispenser is sold with two paper-wrapped refills; the three items cellophane wrapped as a unit. Refills may be purchased separately. Pez is sold from several self-selling display units similar to the transparent plastic one illustrated. At present the dispensers are made in Europe, but negotiations are under way for American production.



Vacuum-packed cigars in a key-opening can

P. Lorillard Co. is test marketing in special areas vacuum-packed cigars in key-opening metal containers. The new container, designed to keep its contents factory fresh indefinitely in flavor and aroma, is a round metal can with a conventional slotted key attached to the top and holds 25 Headline Invincible cigars. It is reportedly the first vacuum-packed metal container to be introduced for a nationally advertised cigar brand.

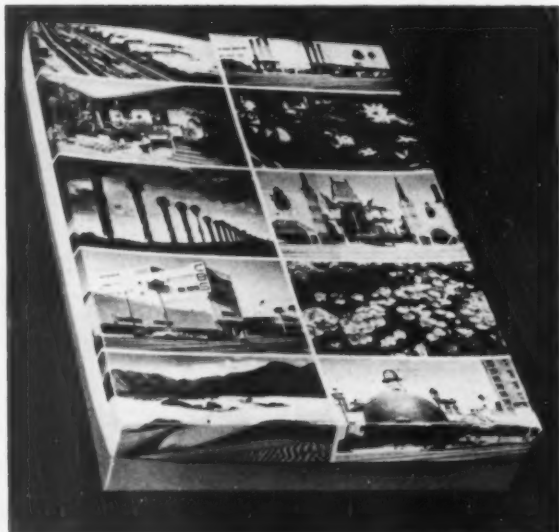
Many months of research went into development of the can. Before production began, it underwent special laboratory tests simulating various weather conditions. The can, attractively lithographed in red and white, was first introduced in Kansas City, where giant displays of the new pack were given dominating position in a drug super-store chain. As production permits, the vacuum pack will be distributed to dealers nationally.

CREDIT: Cans, Continental Can Co., New York



Design

Scenic Southern California on a box sells shirts



The pictorial box used by the Moss-Amber Shirt Co. of California has turned out to be an outstanding attention getter for packaging men's hand-crafted leisure shirts. The two-piece set-up box employs a lid wrap with 10 full-color-lithographed scenic views of Southern California. This is claimed to be the first time that four-color reproduction of this type has been incorporated into a package pointed at the retail level by a manufacturer in the apparel industry. Heretofore the company followed the general practice of merchandising shirts in simple packer boxes which retailers discarded, placing shirts in showcase or shelf.

Moss-Amber's colorful boxes have been well received by dealers, who find that the boxes lend themselves well to retail store display and also serve as appealing gift boxes.

CREDITS: Design, Edward M. Marks Co., Los Angeles. Box wraps, H. S. Crocker Co., San Bruno, Calif. Boxes, Ace National Paper Box Co., Los Angeles.

New kind of puffer for British insecticides



PHOTO, PACKAGING REVIEW.

An inexpensive but efficient container for puff or jet spraying of powdered products whose selling price does not justify the use of more costly dispenser packs is being used by several insecticide firms in Britain. Three small orifices in the elongated, oval-shaped pressed-metal top fitted to the flattened can shape provide the dispensing outlet when the container body is squeezed at the sides. The body, a combination of board and paper, is designed to give elasticity and enable dispensing of entire contents. Tinplate ends are seamed to the body. Filling is accomplished through a hole in the bottom, which is sealed with a tinplate plug. The plug cannot be removed without damage and makes the pack virtually tamperproof. According to the angle at which the package is held, a fine spray or a strong squirt of powder can be dispensed.

CREDIT: "PaCa Puff" box, Paton, Calvert & Co., Ltd., Liverpool, England.

Histories

Package is a 'putting hole'

Another plastic container for the United States Rubber Co.'s golf balls (see "Golf Balls in Contoured Plastics," *MODERN PACKAGING*, June, 1953, p. 120) is this re-use package designed for the Christmas gift-giving season that serves as an indoor golf hole for putting practice and as an extra locker shelf. Success last season of a similar package prompted development of an improved design for this year. The styrene plastic container, molded in two parts, holds 12 balls. The clear, transparent cover permits a full view of the product when displayed on the sales counter.

Base of the container is a shade called "fairway green" and is so designed that golf balls aimed accurately during putting practice are guided by molded-in runners out of the path of subsequent balls.

CREDITS: Package molded by Cowan Boyden Corp., Providence, R. I., using Bakelite styrene supplied by Bakelite Co., Div. of Union Carbide & Carbon Corp., New York.



Le Can Can

There's a mint of money to be made by the firm which is quick to adapt themes of popular interest to a gift-packaging idea. This fall, while the country is still talking about the movie, "Moulin Rouge," depicting the life of the French poster artist, Toulouse-Lautrec, and while the musical hit, "Can Can," is packing them in on Broadway, Sherry Wine & Spirits Co. will be offering its customers an assortment of wines or spirits in a handsome lithographed metal container designed with Can Can dancers adapted from a famous Lautrec poster. The amusing, decorative package, which is called "Le Can Can," will be a conversation piece wherever it goes and is suitable for permanent re-use as a storage container or hamper. Decorative cushioning material is shredded acetate-laminated foil.

CREDITS: Container made by Hamilton Industries, Hamilton, Ohio, and distributed by Alanberry Co., New York. Design adapted by Petra Cabot, New York. Cushioning material, Metlon Corp., New York.



PROGRESS IN



STREAMLINED is the word for Baby Magic line, one of two squeeze-bottle filling lines in Mennen's sleek new Morris Plains, N. J., plant. Every piece of equipment is tailored to the special requirements of plastic bottles and production flows at the rate of 100 a minute.

The rapid rise of the polyethylene squeeze bottle to the status of a standard, mass-production package for many categories of products has brought with it sharp pressure on packaging departments to increase the mechanization and cut the costs of squeeze-bottle lines.

As long as the squeeze bottle was a novelty able to command a premium price for its product and as long as its future remained uncertain, even the largest packagers were content with makeshift methods of filling, plugging, capping and sealing. But with consumption this year expected to hit close to 200 million bottles, taking more than 1,000 products to market for more than 500 companies, and with price competition growing between rival squeeze-bottled products, the time has come, most managements feel, to put this

new kind of packaging on a permanent, efficient, economical basis.

In a way, the arrival of this phase is a measure of the progress of the plastic bottle. It has arrived. It must now prove that it can pay its way, without the costly hand labor that modern mass production abhors.

The problems

Some of the same unique, functional qualities that have made the squeeze bottle a sales sensation—its light weight, its flexibility, its means of dispensing an atomized spray—are at the same time the headaches of bottling lines built to handle heavier, rigid, uncomplicated glass containers. Special fittings may be required on conveyor belts to keep these featherweight bottles from toppling. A gentle touch unknown to high-speed glass lines is required for a flexible

container that may collapse, when empty, or squirt, when filled, if gripped too hard. Finally, there is the problem of assembling capillary tubing precisely in plugs and seating the plugs in these collapsible bottles—a wholly new packaging problem.

For many months now, the best engineering brains of the squeeze-bottle producers, users and machinery makers have been concentrated on these problems. On the basis of a survey just completed by MODERN PACKAGING, it can be said that real progress has been made. Only one operation—placing the combined plug-and-tube assembly in the bottle—still has not achieved mechanization in any commercial operation.

But solution of this last problem, too, may be just around the corner. After more than a year's work, one manufacturer of special machinery

SQUEEZE-BOTTLE FILLING

The problems are being licked; on the more-advanced lines today only one troublesome hand operation remains

has a pilot model, ready for a try-out in a squeeze-bottling plant, which reportedly will cut the capillary tubing to length, insert it in the plug and plug the bottle—all in one automatic operation.

Mechanization is by no means universal; on the contrary, only a handful of the larger companies have achieved any measure of it. And there appears to be no standard solution for squeeze-bottle handling problems; what works for one company, or one shape of container, may not work for another. But the important point is that precepts have been established and—as with all new package forms—the principles will quickly filter down from the pioneers to the great body of packagers, large and small, who should now find it possible to adapt these principles to their own situations. It is the purpose of this article to enlighten other packagers through a close examination of those operations which have reached the highest degree of mechanization.

Since the toilet-goods industry is the historic pioneer of the squeeze bottle¹ and is still by far the largest user (taking 60 to 70% of current production), it is not surprising that the best current examples have been found there.

Of all the squeeze-bottling operations observed by MODERN PACKAGING, the two most advanced in mechanization are those of Colgate-Palmolive-Peet Co., on Veto deodorant, and the Mennen Co., on Baby Magic and Mennen Deodorant for Men. Both are specially engineered, fully integrated lines, hitting speeds of 55 to 100 bottles per minute.

Colgate's solution

Engineers who worked out Veto's line were confronted with Problem No. 1: holding the somewhat buoy-

ant, lightweight, tapered bottles upright as they move through the steps of production. Unsupported bottles riding free on a moving belt would naturally tend to topple, especially sharply tapered designs, and often tend to ride up on other bottles. Moreover, a way was needed to keep the bottles upright when under the head of the filling machine, the plugger and the capper.

Inventive Colgate production men came up with a clever polyethylene cup, of the correct size to hold the squeeze bottle during the entire production cycle. A total of 175 of these cups was made and fastened to the

entire length of the moving belt which passes through the filler and capper. Now, rather than riding free, each bottle, firmly seated in the cup, is held captive to the belt. The bottle remains in the cup until filled and capped.

Change-over from one to another of Colgate's three bottle sizes—0.7, 1.2 and 2.25 oz.—takes two men 8 hrs., including time for steaming all the equipment to remove product residue. This much time is needed, since each cup must be unscrewed and replaced with a new one. Nevertheless, Colgate production men consider this time negligible when balanced

A victory for mechanization



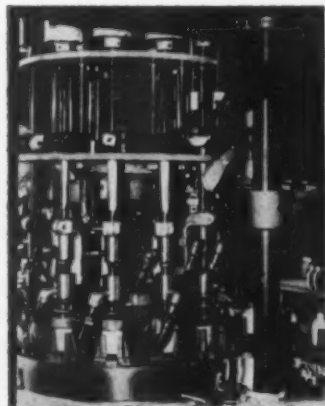
PLUG-TUBE ASSEMBLY for spray bottles is now handled semi-automatically in many plants on machines like this one at Colgate's. Replacing a tedious and costly hand operation, it measures, cuts and inserts length of tubing in polyethylene plug, ready for filling line, at 40 per minute.

¹ See *Packaging's Hall of Fame*, "Stoppette Spray Deodorant," MODERN PACKAGING, April, 1953, p. 136.

Colgate's line for spray deodorant



GIANT HOPPER feeds Veto polyethylene bottles at start of production line. Unscramblers are not practical for these lightweight bottles, but a single operator can keep conveyor line supplied. Hopper holds 4,000 bottles.



GRAVITY FILLER of standard rotary type used for glass bottles has been successfully adapted to handle squeeze bottles.



HAND OPERATION still is placing of pre-assembled capillary tube and plug on bottle. Special molded-polyethylene holders carry bottles on endless chain for filling and capping.



INGENUITY of Colgate engineers produced this machine, one of few in use which automatically seats plugs after manual starting. Line (front) is moving to left. Three-head hammer, rotating on a simple crank pin synchronized with line, strikes each bottle three successive blows as it passes, driving plug home safely.

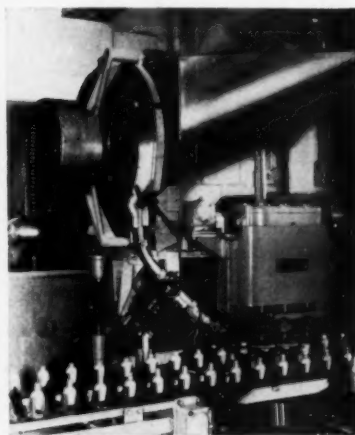
against the line's speed and efficiency, with almost total elimination of down time.

A standard gravity filler is used, specially adapted for polyethylene bottles and for pocketed conveyor lines like Colgate's. The fact that each bottle is precisely positioned and spaced helps to assure a perfect filling operation; the method also times the container after the filling operation through plug insertion and capping. A feature of the filling machine is an "absolute level of fill" control—very important to squeeze-bottle functioning.

Of course, every squeeze bottle with a spray effect must be equipped with a plug and a capillary tube. Colgate is one of several companies which now have the comparatively new, semi-automatic machines which, with the aid of an operator, insert the tube in the plug. Before this machine was developed,² making the assembly had been a hand operation, almost as tedious as threading a needle.

As it now stands, squeeze-bottle packagers have the option of buying plugs and tubes already assembled from a supplier, or—if their volume justifies purchasing a machine—buying tubing in roll form and making the assembly in their own shop, as Colgate does. At Colgate the machine is

² See "Mechanized Squeeze Bottling," *MODERN PACKAGING*, Aug., 1951, p. 68.



CODING squeeze bottles, without paper labels, is difficult. Colgate solved problem with special attachment (foreground) on feed chute of capper which die stamps liner in each urea closure just before it is automatically applied to bottle. Previous hot stamping on back of bottle was unsightly.

operated apart from the main production line. A single operator has no trouble completing 40 assemblies a minute. The assembled units are stored in cartons and brought to the line as needed. Most of the time, by working ahead, a single machine can keep the main line supplied; when necessary another operator is put to work on a second assembling machine.

The plug-and-tube assembling machine can handle a variety of tube lengths from two to six inches. Changing length requires cutting to size a short piece of metal tubing which serves as a spacer, inserting it in the measuring and cut-off device, and adjusting the positions of related parts accordingly. The cutting operation is said to be accurate to $\frac{3}{64}$ in. or less, with the cut ends square and clean. Flanged plugs having flat tops, as well as certain nasal-plugs, can be accommodated by suitable adaptation of the plug holder, tubing guide and tong at the factory.

Nothing is more essential to proper functioning of a squeeze bottle than accurately seating the plug in the bottle. Not only would a poor fit invite faulty spraying, but it would also result in annoying leakage and, for some types of products, evaporation.

Colgate, like all other squeeze bottlers, starts the plug-and-tube assembly into the bottle by hand. Two operators (plus an inspector) are required to keep up with the average 55-bottle-per-minute speed of the Colgate line, dropping an assembly

quickly into place in each bottle as it passes on the conveyor line from the filler unless the machine now in the development stage, previously mentioned, proves practical. No one yet has solved the ticklish problem of feeding the flexible tubing into the bottle mechanically. There is now equipment in use that will seat plugs only, without the capillary tubing, but these can be used only on non-spraying bottles, such as those designed for skin creams and shampoos.

Once started, the plug and tube must be tamped home. On this operation, Colgate has gone further with mechanization than most. In place of the single, hand-operated plunger used on most lines, the company's machine shop rigged a gang set-up that handles three bottles at once, with three metal plungers revolving on a simple crank pin. In addition to being faster, the gang device has proved more satisfactory than the straight up-and-down motion of the single plunger, which tended to seat the cap in a lop-sided position and also to depress the wall of the bottle near the neck. With the new device, the plungers ride forward at the same speed as the line and a plug is gently tapped by all three plungers before it is finally in place.

A conventional type of capper is used for Colgate's squeeze bottles. It has, however, an interesting attachment which codes the inside cap liner as each cap passes from the sorting hopper through a chute lead-

ing to the bottle. The coder is operated by a solenoid activated by the containers themselves each time a cap is indexed for application.

Originally the plastic bottles were hot stamped on the back by an operator as she placed them in their plastic cups at the beginning of the line. Several disadvantages cropped up. Legibility was not uniform, the printing was unattractive on the well-designed bottle and bottles were sometimes stamped twice, causing confusion.

In squeeze bottling, the critical area of the liner is the spot directly over the tiny orifice of the plug, on which it seats. A code of two digits can be stamped on either side of this area without endangering the seal.

In a small amount of space, Colgate has made an uncomplicated job out of feeding empty bottles to the line from a giant hopper with transparent plastic walls holding up to 4,000 of the 2½-oz. bottles. Cartons of bottles are simply dumped into the hopper, a procedure which would not be possible with glass containers.

Layout of the U-shaped line is made unusual by the endless chain of cups traveling clockwise through the filler, past the plug-and-tube inserters and through the capper. At the end of the line, the bottles are lifted out of their cups by a transfer operator who places them on a wide conveyor belt leading to the packing table. A highly compact arrangement, it fits the space limitations of the industrious Colgate plant.

Involved in the final phase of packaging Veto are hand operators who make up individual display boots into which bottles are inserted and two girls who set up folding boxes and insert boots in quantities of $\frac{1}{2}$ doz., 3 doz. and 6 doz., depending upon the size. Occasionally the \$1-size Veto is packed six to a counter carton. One man packs shipping cases with cartons and seals them.

Mennen's new lines

In the Mennen Co.'s spacious new showplace plant in Morris Plains, N.J., separate, straight-line layouts are provided for the deodorant and for the Baby Magic skin lotion. Although both products use polyethylene squeeze bottles, they have slightly different filling and handling considerations.

Because Baby Magic is a cream-type product, requiring no atomizing,

OVER-ALL VIEW of Colgate line, which works in U-shape from bottle hoppers, center left, around through filler, plunger and capper and onto packing conveyor in foreground. Smaller sizes of Veto deodorant go into individual paperboard boots; larger sizes are packed six to the counter carton.



THE BOTTLENECK



NO MACHINE has yet been commercially introduced that will automatically insert the awkward plug and tube required for spray-type bottles—although one is reported to be on the way. Squeeze bottlers at present are forced to start the plug manually and drive it home with some such device as the lever-style plunger shown here on the Mennen deodorant line.

a simple plug without tubing or atomizing chamber is used. This has permitted Mennen to mechanize the plugging operation and this line, as a result, is probably as completely mechanical as will be found anywhere among users of polyethylene bottles.

The plugging machine is an adaptation of one originally produced for the pharmaceutical industry to cap glass vials with plug-type polyethylene closures. The vial closures of course have a shoulder which seats against the rigid rim of the glass. Handling a flexible bottle (in which neck openings are unfortunately not always as perfectly centered as in glass) and ramming the plug to a precise position without having a shoulder-and-rim stop were the problems successfully met in the adaptation. The plugs are fed from a chute into an upper star wheel while the bottles travel in another star wheel below. A plug is positioned in each bottle and as the bottles move around the turret, a plunger gradually forces the plugs into position.

This machine—which is possible

only because of the absence of a capillary tube—is the only significant difference between the two Mennen lines. Despite the requirement of extra hand labor on the deodorant line, both operate at the impressive speed of 100 bottles per minute.

The trial-and-error procedure that Mennen went through in finding the right filling machine for the lotion-type product such as Baby Magic is typical of the squeeze-bottle pioneers and should serve as a valuable checklist for other packagers facing similar problems.

First attempts were made with a vacuum filler. They found that vacuum, unless carefully applied and controlled, would collapse the bottle. Careful inspection of the liquid level also had to be made with a fluorescent light placed behind the line.

Perhaps if the bottles were chilled, Mennen's production men conjectured, they would be stiffer and less likely to collapse. However, the bottles collapsed when cold just as easily as when warm.

Before scratching a vacuum filler

off the list, the company drew upon its experience with vacuum filling of cans. By shrouding the outer surface of the can and applying vacuum to the outside as well as the inside, collapse could be prevented. While theoretically a good idea, this had many disadvantages. Many changes had to be made, such as adjusting the lift of the machine, making suitable enclosure between the shroud and the base plate and having the shroud of such construction as to maintain its shape without fail in the interests of a good seal. It was found extremely difficult to position the nozzle through the small neck opening in the bottle.

It happened that the company had available a machine that had been used in the past for filling collapsible tubes. This machine measures the volume of product in a piston and discharges it into the container. The weight measure was accurate within acceptable limits. Discharge of the product into the container, however, caused sufficient turbulence to force some of it up and out of the neck. Steps had to be taken to keep the nozzle clean so that when withdrawn from the container opening, little or no product would be left on the inner surface of the neck. A smeared nozzle would in turn wet the inner surface of the next bottle. A lubricated surface between the wall of the neck and the friction-fit plug would obviously be undesirable for a lotion-type product.

With indicated adjustments, this machine would have been good for about 15 bottles a minute—only about a third of the production requirements at that time. But experience with this machine gave Mennen a guide to the type of equipment required. A machinery company was asked to build a unit that would fill approximately 90 four-ounce polyethylene bottles per minute through a neck opening of $1\frac{1}{32}$ inch. Mennen specified accurate weights, no splashing of product during filling and clean nozzles throughout the filling cycle.

The resulting machine, operating on the pump-measurement principle, is basically a standard type used to fill bottles with both heavy and thin liquids and is now in operation at the Mennen plant.

A slight design change holds to a minimum the wetting of the inside wall of the neck when the nozzle is

lowered and raised through the opening. This machine delivers the product to a filling head, through a pump, uniformly and constantly while the machine is in operation. Product delivery is through ports in the head of the machine to the container. Filling the container from the bottom up, the nozzle rises ahead of the liquid level in the bottle and is thereby kept clean. Mennen reports that the machine is entirely satisfactory from speed, accuracy and cleanliness viewpoints.

On the spray-deodorant filler, pressure and vacuum are used in combination, permitting speeds comparable to those obtained in vacuum filling glass bottles.

Such production is possible without excessive collapsing or bulging of

the container so that extremely accurate filling results. Equipped with a patented device which precludes excessive force being applied to the neck of the bottle, the machine manages to avoid deformation. It is also supplied with a new foamy overflow handling system for efficient filling of extremely foamy products without the use of settling tanks or the like.

Aside from the special type of filler, Mennen's spray deodorant is handled, for the most part, similarly to Colgate's Veto.

Mennen's special-mold bottles, however, designed with a wider base, ride free on a conveyor between two guide rails. The danger of bottles riding up on each other is avoided with a bottle purposely designed with wide surface contact on the side.

Mennen has the same automatic machine as used at Colgate to assemble the tube and capillary plug for the spray product and again it's a side-line operation, not part of the line.

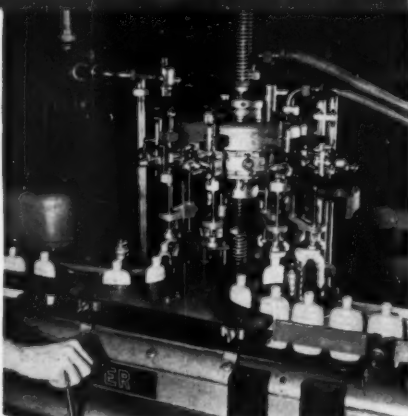
The assembled plugs are placed by hand on the bottles after the filling operation. Three operators are required for the starting operation and a single operator (plus a relief operator) with a lever-type hammer drives the plug home.

A standard capper, similar to those found on glass-bottle lines, is used by Mennen. The big problem on this type of installation is to avoid excessive pressure when the grippers hold the container so that contents are not squeezed out. This has been done by
(This article continued on page 217)

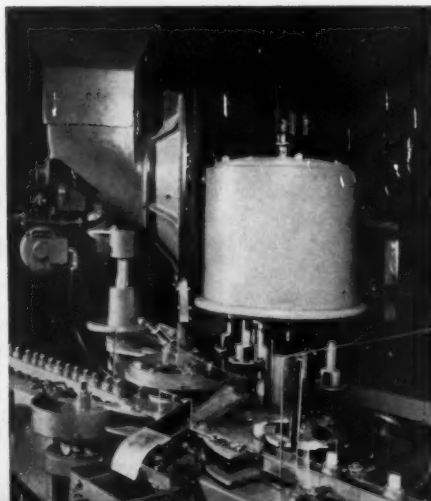
Mennen's 100-a-minute production



AT START OF LINE for Baby Magic, bottles are picked out of hopper by threes, in sequence of three colors, to give desired color assortment in final shipping package. Here bottles ride free between two guide rails on conveyor.

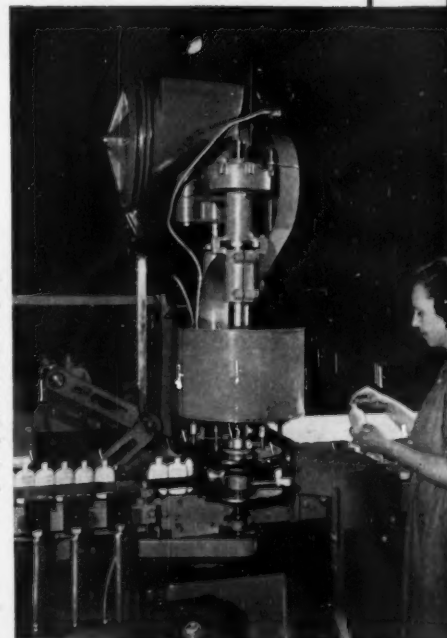


PUMP-MEASUREMENT filling on rotary machine was found best for Mennen's easily compressed bottles after long trials. Filling the container from the bottom up, the nozzles retract with the fill, thus keeping the neck of bottle clean.



AUTOMATIC PLUGGER is possible for Baby Magic because it is non-spray product using simple plug with no tube. This machine was adapted from pharmaceutical vial plugger, designed to put polyethylene closures in glass. Sorted plugs feed down chute to upper star wheel, are rammed home by plungers as bottles revolve in lower star wheel. Fit is spot checked.

AUTOMATIC CAPPER is adapted from standard glass capper, with special stops on bottle grippers to avoid excessive pressure that might squeeze contents out of bottle.



PACKAGING



1 New larger-sized jars have been added to the Jumbo Peanut Butter and Jumbo Apple Butter line merchandised by the Frank Tea & Spice Co. The new 24-oz. peanut-butter jar and the 28-oz. apple-butter jar are identical in design to the smaller-sized caps and jars that incorporate the figure of the elephant, Jumbo, in the mold. Private-mold jars, Armstrong Cork Co., Lancaster, Ohio. Caps (77 mm.), Phoenix Metal Cap Co., Chicago.



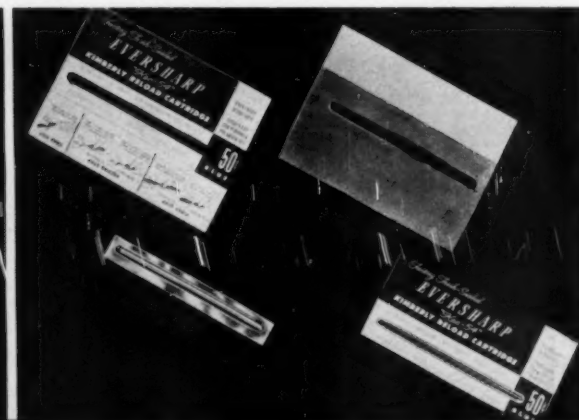
2 Plastic mesh boxes made up in a variety of colors and overwrapped with printed cellophane sheets package fresh Michigan blueberries sold under the "Royal" trade name. The box enables a six-sided view of the product. Cellophane sheets, printed with yellow crown and lettering, are held over the boxes with elastic bands. Printed cellophane sheets, Milprint, Inc., Milwaukee.



3 New folding cartons for Will & Baumer Candle Co., Inc., Taperlite Candles take full advantage of pictorial display. The kraft-backed cartons have an automatic bottom and a tuck top for semi-automatic set-up. They come in three sizes, for 10-, 12- and 15-in. candles, each holding six cellophane-wrapped "Two-Packs." The two-color printed and varnished carton has an unvarnished spot on the end for color identity. Cartons, Sutherland Paper Co., Kalamazoo, Mich.

4 Three chests made of new rigid-drawn ethylcellulose sheet material give new color appeal and dramatic third-dimensional design to re-use gift packaging. The generous-sized 4½-in.-deep containers which have many after uses to store lingerie, gloves or flatware are presented in three patterns: "Sweetheart" (illustrated), "Cathedral" and "Riviera." Chests molded by Celomat Corp., New York, using Dow Chemical Co. Ethocel plastic.

5 A very functional application of the vacuum-formed plastic blister display package is for cartridge refills for Eversharp ball-point pens. The transparent acetate blister, formed to house the cartridge, has a lip that holds it in place when set in the card's die-cut opening. Twelve in a display dispenser get the refills on the counter. Package, Merit Displays Co., New York.



PAGEANT

6 Convenience and economy are combined in the new shaker-top packages for John H. Breck, Inc., hair preparations and shampoos. The new bottle with special depth finish is topped with a polyethylene plastic shaker fitment and deep unlined molded closure. Formerly, a two-piece molded closure was required for shaker dispensing. Bottle, closure, shaker fitment, Owens-Illinois Glass Co., Toledo. Label, National Label Co., Philadelphia.



6

7 The new Brooks family-sized Barbecue Sauce container has a completely different bottle, cap and label adopted on the basis of recent market studies. The larger size is for economy, the larger opening for easy pouring. The fluted bottle matches the other distinctive bottles in the Brooks family. Bottle, Owens-Illinois Glass Co., Toledo. Closure, White Cap Co., Chicago. Label, Muirson Label Co., Inc., Peoria, Ill.

7



8

8 Colony Food Products, Inc., has introduced a special paper bag for storing and shipping 30 lbs. of Sta-Wite peeled, ready-to-cook potatoes for institutional use. An inner wall of polyethylene-laminated kraft is reported to protect contents from outside contaminating odors, shield against rapid temperature changes and slow evaporation. The outer wall is of high-wet-strength treated kraft. Bag, Equitable Paper Bag Co., Inc., Long Island City, N. Y.

9 Hardening of brown sugars and caking of confectioners sugar is reported by The American Sugar Refining Co. to be eliminated with these new Domino packages fitted with specially treated waxed glassine paper inner liners with fold-down top. The liner is said to retain the moisture content of brown sugars and prevent atmospheric changes affecting the refinery fluffiness of confectioners sugar. Four of American Sugar's five refineries are now using this package. Inner liner, Riegel Paper Corp., New York.

10 Full-color rotogravure-printed cellophane bags in four designs have been adopted for Clown Confection Co.'s "Stay-Fresh" marshmallows. Bags illustrated various mouth-watering marshmallow uses. Two Pillsbury grand-national winning recipes for preparing desserts with marshmallows are printed on the back. The colored marsh-



10



9

11



mallows are visible through unprinted areas of the wrap. Bags, Milprint, Inc., Milwaukee.

11 Rotogravure-printed gold-colored foil wraps for 1/4-lb. prints of Verifine Sweet Cream Butter offer better product protection and give the package a rich appearance and "cool" feel, designed to attract impulse sales among self-service shoppers. The 1/4-lb. units are packaged in a 5-lb. yellow display carton. Wraps and cartons, Milprint, Inc., Milwaukee.

12



13



12 Better Taste Popcorn Co. has introduced a series of "Sports Champion" tumblers for Davis Ready Mix Popcorn, listing, in applied color labeling, national champions in three major sports. Shown is one listing national collegiate basketball champions over a 13-yr. period. Tumblers, Owens-Illinois Glass Co., Toledo. Lithographed metal closures, White Cap Co., Chicago.

13 Unusual dispenser-type cartons that may be used for wall or counter display have been adopted for Remington Shaving Powder Stick, a new Remington Rand product. Part of the carton itself is used as an internal divider between the two rows of shaving sticks enclosed, which is said to simplify the setting-up operation. Carton, Sutherland Paper Co., Kalamazoo, Mich.

14 Chocolate-covered bon bons with cherry ice-cream filling, produced by the Borden Co.'s Pioneer Div. under license arrangement with De Cicco's Bon Bon Corp., come in cartons attractively printed with a cherry plaid background upon which are strikingly realistic, appetite-appealing illustrations of the product whole and cut in half to show the ice cream center. Fidelitone printed cartons, Lord Baltimore Press, Baltimore, Md.

15 Re-use refrigerator bottles for Mann's Pure Apple Juice and Mann's Pure Apple Cider come in three sizes: quart, half gallon and gallon. Four crisp-looking apples feature all labels. Bottles, Glass Containers, Inc., San Francisco. Labels, Carton Label & Lithograph Co., San Francisco. Metal closures, Western Crown Cork & Seal Corp., San Francisco.



P G E A T

16 A novel gourmet gift package is this book-type, three-color-printed paperboard package that opens up to reveal six transparent boxes of different herbs adhered to the board and printed information on herbs and their use. The package, called "Erbert the Herb," is one of a series of "volumes" put out by De Gonia's of California. Package, John D. Roche, Inc., Los Angeles. Plastic boxes, Plastic Service Co., Los Angeles, using Monsanto styrene.

17 General Foods Corp.'s vacuum-packed Sanka coffee in redesigned cans has reached grocers' shelves in the Northeast and will soon be in use nationally. Former orange and black colors are retained, but the center portion of the front panel has an oval shape with a white strip at the bottom saying, "Lets You Sleep," and pointing out that Sanka is "97% caffeine-free." Cans, American Can Co., New York, and Continental Can Co., New York.

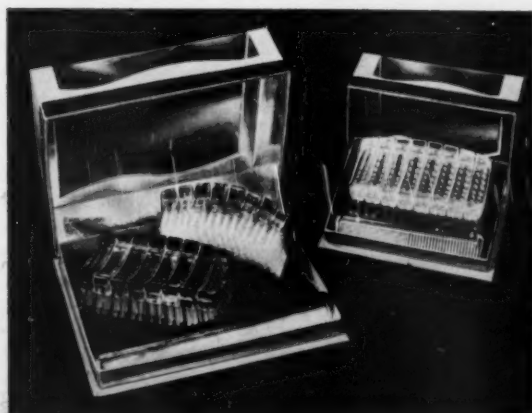
18 Applied color labeling on new bottles for National Laboratories' Vani-Sol Bowl Cleanse incorporates a scale which graduates the contents of the bottle in multiples of 2 oz., giving the consumer economy through accurate visual measurement, since 2 oz. are sufficient for each cleaning operation. Bottle, Anchor Hocking Glass Corp., Lancaster, Ohio. Lithographed metal closure, Armstrong Cork Co., Lancaster, Ohio.

19 The squat, wide-mouth jar for Kay Packing Co.'s Milrose Spanish Olives is not only designed for re-use as a refrigerator storage container, but provides a jar that's convenient for removal of the olives. The jar is topped by a rubber-ring-lined screw cap. Jars, Knox Glass Bottle Co., Jackson, Miss. Lithographed metal closures, Crown Cork & Seal Co., Baltimore, Md.

20 Hughes "Flex-Action" men's hair-brush sets will be marketed this Fall in these "split-extension" window display boxes, handsomely designed in red and gold. When the cover of this patented box is raised, the bottom is tilted from the rear, forming an effective display unit. Die cut extending down from the top cover to the front panel is covered with ethyl cellulose plastic sheeting. Interior of the box is gold-foil lined. Box, Imperial Box Corp., Quartin Div., Brooklyn.



16



19



18

GIANT 'TUBE'



PHOTO, THE BRITISH PACKER.

NEW PACKAGES as used by Sterno, Ltd., of London in quart and pint sizes for motor oil and anti-freeze. One-piece container has heavy, almost rigid walls, is opened by pull tab which tears circular opening in container wall, to which it is cold welded.

A new kind of extruded aluminum package—something of a cross between a can, a bag and an over-sized collapsible tube—has made its appearance in Britain. Used in quart and pint sizes for Sterno motor oil and anti-freeze solution, it has some unusual features that commend it to American attention.

Extruded from a single slug of aluminum, the one-piece container is simply filled and then crimped shut at the top like a tube. Almost rigid, the walls are like stiff aluminum sheet, rather than the soft alloy used in roll-up tubes.

An unusual and intriguing feature is a pull-tab opening device, which breaks away a cold-pressure-welded spot seal near an upper corner for pouring. Readily removed, the spot seal cannot be replaced, making the package tamperproof—an outstanding advantage in Britain, where the conventional motor-oil can has a screw-cap closure. The round, food-type, quart can for motor oil, as used in this country, is almost unknown in Europe.

The "Alibag," as Sterno, Ltd., has named it, stands firmly on its round base. Paper labels are successfully

applied with a special adhesive. The crimp seal and the unique closure are said to be leakproof and the package generally will stand rough handling as well as a can. It will not rust or corrode when displayed in open racks in filling stations and it does not roll around when carried in the car.

The containers, extruded by an aluminum rolling mill on a press especially built for the large diameters, are supplied to Sterno as open-end cartridges with the spot-seal opening tab already attached. The tab is of aluminum sheet heavier and more

FOR OIL

British extrude aluminum to 3 1/2-in.-diameter quart size
for anti-freeze and motor oil; it's made like a tube, looks
like a bag, acts like a can

rigid than the container itself; when pulled, it simply tears away the 3/4-in. round section of the container wall to which it is welded.

The Alibag is filled on a conventional gravity-filling machine. A special closing machine flattens and double folds the top; a separate, pedal-operated machine crimps the fold. Jaws of the crimper can be fitted with up to three code stamps for coding the filled containers. Labels are at present applied by hand.

Quart sizes are used for both motor oil and anti-freeze. Motor oil also is packaged in a pint size for the benefit of the smaller British cars and motorcycles, which customarily are fed by the pint rather than the quart.

Dimensions make clear the difference between this package and the tiny, single-shot, tear-open collapsible tube familiar in this country, which it somewhat resembles in shape. The quart Alibag has a base 3 1/2 in. in diameter and is 10 1/4 in. high. So far as is known, extruded tubes of such size have never been produced in this country. The pint size is 2 1/2 in. in diameter and measures 9 1/2 in. high.

The labels, newly designed, have a family resemblance, with color distinctions. Regular Sternal motor oil has a dark blue and yellow combination offering good visibility at a distance; an additive-processed oil, illustrated by the pint-size package in the accompanying photograph, uses a gold-colored laminated foil label printed in royal purple. The anti-freeze label is turquoise and white, with the words "anti-freeze" printed in red.

Although Sternal, Ltd., adopted the extruded aluminum container at a time when tinplate cans were still heavily restricted in Britain, its suc-

cess has been such that it is continuing to use the Alibag as a standard package even though prewar cans are once more available.

While the special package would appear to be somewhat more costly than a lithographed can, the British publication *The British Packer*—which first disclosed this interesting story—states that Sternal has been able to absorb the cost "so that the oil packed in Alibags costs no more than

the oil dispensed from bulk-supply tanks."

CREDITS: Extruded aluminum tubes, Enfield Rolling Mills (Aluminum), Ltd., Ermsdown, Enfield, Middlesex, England. Cold-welded pull tab, General Electric Co., Ltd., of England. Filler, folder and crimper, E. Cowles, Ltd., Hounslow, Middlesex. Labels, Livermore & Knight, Ltd., 140/2 St. John St., Clerkenwell, London, E. C. 1. Label adhesive, The Yorkshire Dyeware & Chemicals Co., Ltd., Kirkstall Rd., Leeds 3, Yorkshire.

PHOTO, STERNOL, LTD.



WHEELED DISPLAY
rack is supplied to filling stations. The package stays bright and rust free in dampest weather.

Best way to keep your powder dry

Powders, tablets and other pharmaceuticals, in ever-increasing volume, are now being marketed in PLIOFILM laminated packages — for a very important reason:

PLIOFILM can be heat-sealed at a wide range of temperatures to form a tough, lasting, moisture-tight seal — a seal that is as strong as the package itself.

And in addition, PLIOFILM is moisture-resistant, non-toxic and doesn't wrinkle. It can be laminated to paper, foils, other types of film, or to itself, or used as a single film. It takes printing beautifully.

However you use PLIOFILM, you'll find it cheapest and best in the long run for safeguarding any moisture-sensitive product. If you're packaging coffee, chocolate, spices or similar items, why not talk it over with the Goodyear Packaging Engineer. Address: Goodyear, Pliofilm Dept. 1-6418, Akron 16, Ohio.



HAVE YOU MET THE G. P. E.?

Got a packaging problem? The Goodyear Packaging Engineer can help you solve it by designing a PLIOFILM wrap that's made especially for you. Write or wire him today.



We think you'll like
THE GOODYEAR TELEVISION PLAYHOUSE
every other Sunday—NBC TV Network



Plioform, a rubber hydrochloride—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio



Good things are better in

Plioform

3-way protection against air, moisture, liquids

Canned whole milk

'Fresh' for months without refrigeration, it may have a considerable impact on marketing practices in the milk industry



"READY TO DRINK" is the sales catcher for Med-o-Milk, suggesting both convenience and flavor which distinguish it from powdered and condensed competitors. This is whole fluid milk, homogenized and pasteurized, with nothing added or taken away. It keeps indefinitely in the can, without any refrigeration, because natural bacteria, which cause milk to spoil, are excluded. The cans are currently being marketed in three different sizes—6-oz. (one glass), quart and 1½ quart.

A new and potentially important contender—whole "fresh" milk in cans—has recently entered the dairy-products sales arena in a number of selected U. S. test markets, with favorable consumer response reported. Made possible through the perfection of flash sterilization and new aseptic canning techniques, the product boasts a number of interesting features and will bear watching for its impact on prevailing milk-packaging and distribution methods.

The canned product, which requires no refrigeration and may be stored for extended periods, is presently being sold as a convenient supplement to regular milk supplies, to be stored on the shelf or in the pantry and used when needed, or to be taken on picnics, camping trips, etc.

Man's dependence on milk—literally from the cradle to the grave—goes back to the dawn of history. Through the ages, as society grew more complex and separated the ultimate con-

sumer from the sources of milk supply, there has been a never-ending struggle to make milk available in more convenient form and to protect this highly perishable product against loss of flavor and spoilage—a struggle in which packaging has played an important role.

In their 12th century invasion of Europe, the Mongolians carried milk curd as a ration. In the 18th century, Nicholas Appert made both packaging and military history by condensing and boiling milk in sealed bottles to provide better rations for Napoleon's armies. J. B. Meyenberg, in 1883, invented the revolving sterilizer, which is still used for processing evaporated milk. Now comes perfection of the Graves-Stambaugh process, which is used in conjunction with aseptic canning for production of Med-o-Milk—the first canned whole milk.

Now being introduced in selected markets in 6-oz., 1-qt. and 1½-qt.

lithographed cans, Med-o-Milk is a product of Med-o-Milk Sales Corp., Chicago. The process utilized in its production was developed by International Milk Processors, Inc., Chicago, organized in 1949 following four years of research by Dr. Roy Graves and John H. Stambaugh, in cooperation with a major can manufacturer and producers of dairy equipment. In March, 1951, the first plant was opened at East Stanwood, Wash., for commercial production of canned whole milk. This plant has confined its distribution to the export trade—primarily to members of our Armed Forces and to Alaska. The second plant, operated by Real Fresh Milk, Inc., at Visalia, Calif., has also been producing canned milk by the same process. In September, 1952, International Milk Processors, Inc., opened at Ridgeland, Wis., the first of several plants to be owned and operated by International. It is the output of this plant that is now being channeled into

domestic distribution through retail food stores in several Midwestern, Southwestern and Southeastern cities.

MODERN PACKAGING has followed this new development closely since the early experimental work by Graves and Stambaugh, realizing that the large-scale marketing of milk in cans requiring no refrigeration would introduce a significant new factor in the entire system of retail milk distribution. Although the establishment of the first plant in Washington marked an important technical milestone, it is only recently that Med-o-Milk has attained the status of a full-fledged consumer product. Accordingly, a review of its interesting production and sales features is in order at this time.

What is it?

Is milk in cans anything new? *Fresh, whole, fluid milk* in cans is definitely new. Canned evaporated and condensed milk have been important packaged products for many years, but these are completely different types of products, made by other methods. They do not have the elusive "fresh" taste and, except in infant formulas, are seldom used for

drinking. Med-o-Milk is actually fresh milk—said to be indistinguishable in flavor and appearance, when chilled, from that conventionally bought in bottles or cartons. The great difference from conventional fresh milk is that Med-o-Milk requires no refrigeration until opened, can be shipped and stored for extended periods without special handling and can be sold through retail food outlets from shelves like any staple.

There are no preservatives added to Med-o-Milk to attain these extended keeping qualities. Due to the specialized canning technique, the product is said to retain its farm-fresh taste and flavor for at least six months after canning. Homogenized and sterilized, the Grade A milk is ready to drink immediately upon removal from the can, requiring no mixing with water, reconstitution or other preparation. Its principal competitor is dry powdered milk, which requires reconstitution with water. And, as a beverage, dried milk—except for the dried skim milk which is popular in reducing diets—has not been the answer. The promoters of the new canned whole milk believe they have

a big edge in taste over dried whole milk.

The convenience of canned whole milk has already made it a favorite with consumers in many areas throughout the world where supplies of fresh milk are normally unavailable or difficult to obtain. Even distant Pacific islands now enjoy Med-o-Milk, which is brought in by occasional supply ships and retains its fresh flavor until ready for use.

Prior to development of the process perfected by Graves and Stambaugh, attempts to maintain fresh-milk flavor in canned milk had proved unsuccessful. Under the newly developed technique, the milk is piped directly from the cow into a stainless steel vacuum tank which affords no opportunity for it to come into contact with the air. Sealed in the tank, it is then rushed to the cannery to be homogenized, flash-sterilized and sealed in lacquer-lined cans—without being exposed to air at any time. The fact that the milk is thus completely free of bacteria when canned accounts for its remarkable keeping qualities.

Med-o-Milk retains the original vitamin-C content of freshly produced

STORE DISPLAY offers maximum selling opportunity, since no refrigeration is needed. Product is not intended to displace daily-delivered fresh milk, but to supplement it.



ADVERTISING stresses drinking qualities and convenience of storing without refrigeration; emphasizes differences between this and other processed milks; backs up story with A.M.A. Seal of Approval.



PHOTO, TELECOIN CORP.

milk for an extended period, it is said, whereas regular bottled milk loses this important vitamin within 48 hrs. after processing. It is said to be even easier to digest than bottled milk because the rapid sterilization process used lowers the "curd tension," making it softer and easier to assimilate. If placed in a refrigerator after opening, Med-o-Milk reportedly will remain fresh tasting and sweet for at least 10 days.

Marketing strategy

Cities selected for the initial retail distribution of Med-o-Milk include Miami, Charleston, W. Va., Dayton, Houston, El Paso, Oklahoma City, Tulsa, Tampa and Albuquerque, N. M. Consumers in these test-market areas have shown enthusiastic interest in the convenience of being able to keep a reserve supply of fresh milk on hand without taking precious space in the refrigerator and serving it as required, fully confident that it will be tasty and healthful.

It has been estimated that the numerous occasions on which the average household runs out of regular fresh milk, due to arrival of unexpected guests and other factors, represent a 5% unfilled demand for milk that can be conveniently satisfied with this new-type product.

Large-space newspaper ads introducing the product in the test cities reveal the company's marketing approach. They have headlined the fresh, natural flavor retained "by instant cow-to-can method." "Don't confuse Med-o-Milk with powdered milk products," states one ad. "Don't

COIN MACHINES offer a major marketing medium for canned milk, not practical for glass or paper packages. This machine has been designed for the 6-oz. Med-o-Milk can, for lunches or snacks in offices and factories. For a dime it provides a cold can, straws and an opening device.

confuse it with 'condensed' milk. Med-o-Milk is utterly new—the greatest milk development since pasteurization. Perhaps the most amazing feature of Med-o-Milk is that it can be kept for months without refrigeration. Think of it! You can store Med-o-Milk on the pantry shelf along with your other canned foods and keep only your daily requirements in the refrigerator. (Cans cool quickly.) Now you need never run short of milk—

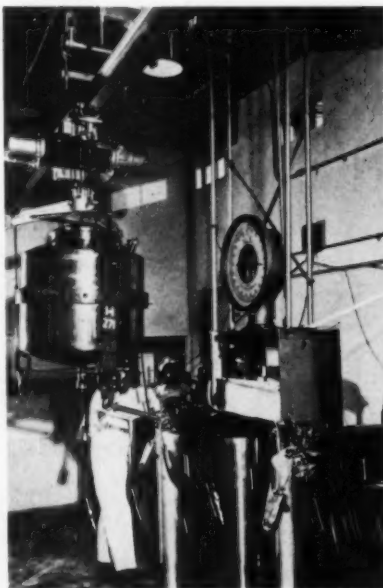
just keep a few cans of Med-o-Milk tucked away on your pantry shelf."

Other sections of the ads have featured the seal of acceptance of the Council on Foods and Nutrition of the American Medical Assn. and the inspection seal of the U. S. Dept. of Agriculture. Housewives are reminded that, thanks to the convenience of the product, they can now shop just once a week for milk—or even once a month if they prefer. The quart and 1½-qt. cans are recommended for general drinking, cooking and preparing infant formulas; the 6-oz. cans are for lunch boxes, picnics, etc.

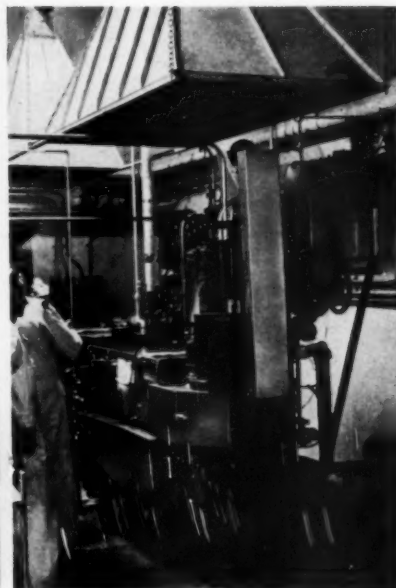
At the present time, Med-o-Milk sells at a slight premium over conventionally packaged fresh milk. The producers feel, however, that ultimately, with increased plant facilities, this differential may be eliminated. Preliminary tests with chocolate Med-o-Milk indicate that this product may have exceptional sales appeal.

Telecoin Corp., New York, is interested in the possibilities of selling the 6-oz. cans of Med-o-Milk through coin-operated dispensers. A demonstration machine for this purpose has been constructed. It is believed likely, according to William J. Doherty of Telecoin, that first use of the machine may be in the export market, in coun-

Milk is sealed from the atmosphere



WEIGHING IN a 50-gal. stainless steel farm tank (hoisted) in which milk is rushed to plant from farm before it can cool. Milk is transferred to vacuum supply tanks in foreground for processing.



CANNING is handled by a conventional Martin aseptic canner after flash-sterilization process to arrest bacterial action in milk. This is Med-o-Milk plant in East Stanwood, Wash.

tries where refrigerated milk is not as common as in the U. S. Eventually, Telecoin may produce dispensers which will handle all three sizes of cans. One plan, still in the early projection stage, is to install dispensers in the basements of apartment houses, providing tenants a constant supply of milk 24 hrs. per day.

Prior to collaborating with Mr. Stambaugh on the development of the new milk-canning process, Dr. Graves was for many years head of the Division of Dairy Cattle Breeding, Feeding and Management Investigations of the U. S. Dept. of Agriculture. Using the Stambaugh farm at Valparaiso, Ind., as a laboratory, the two men launched a series of experiments which ultimately led to the development of the Graves-Stambaugh technique. In the spring of 1946 construction was started on a new-type milking parlor, dairy and pen barn to provide a new method of controlling the raw milk as it comes from the cow, to prevent exposure to air during the processing. By 1947 the investigators were pasteurizing milk under vacuum without previous cooling and getting excellent results.

Considerable time and money were spent in working out machinery for bottling the milk under vacuum be-

fore it was found that equipment was already available for sealing cans in a vacuum.¹ Graves then determined to try canning the whole milk, beginning experiments in the spring of 1948. First attempts were admittedly crude, being conducted with cans and a can-sealer bought at a hardware store. They were of the type commonly used for home canning of fruits and vegetables. Despite the rudimentary equipment used, results were sufficiently encouraging to convince Graves and Stambaugh that with the right equipment and canning technique, canned milk which would retain its freshness and flavor without refrigeration for extended periods was feasible.

Accordingly, the assistance of a can supplier² was enlisted and additional equipment was set up for a comprehensive experiment which was completed in September, 1949, paving the way to final perfection of the process.

Processing

The accompanying photos, which were taken at both the original plant in Washington and at the new Ridge-

¹ Martin aseptic canner, manufactured by James Dole Engineering Co., Redwood City, Calif.

² Continental Can Co., New York.

land, Wis., plant, illustrate the fundamental steps in canning whole milk by means of the new process. The first step actually takes place at the dairy barn of each participating dairy farmer, where the milk is piped directly from each cow into a portable stainless steel tank via a closed, sanitary system. Mounted on wheels, the 50-gal. tanks are kept on elevated platforms from which they can easily be transferred to pick-up trucks without lifting. By scheduling pick-ups so that they follow closely after milking periods and by selecting dairies close to the plant, it is possible to handle the milk without cooling.

When the trucks pick up a full tank at the farm, they leave a clean, sterilized tank for the next milking, thereby reducing the expense and labor required to handle the milk in the conventional 40-qt. cans. Farmers report that they can handle twice the number of milk cows without extra labor using this system. Arriving at the processing plant, the farm tanks are wheeled inside, where they are weighed and the milk drained by gravity into preheating tanks. Here the butterfat content is adjusted to a known value and the milk is preheated until it can be sterilized and canned. The entire process is regulated by elaborate automatic controls which are said to insure complete product protection at all times.

Preheated, standardized milk is drawn through a 270-gal.-per-hr. homogenizer which disperses the butterfat globules by forcing them through a valve at high pressure. This equipment, in addition to breaking up the fat clusters, also acts as a high-pressure pump to force the milk at rapid velocity through the sterilizing and cooling units. The sterilizer, designed by Graves, consists of two hollow cylinders through which steam is passed. Flash heating the milk to a temperature of about 285 deg. F. stops the action of enzymes and kills all bacteria during the 8-sec. holding time without, it is said, "cooking" the milk to impair the flavor.

Sterilized milk immediately enters the cooler, still under high pressure and traveling at high velocity. It is quickly cooled to a temperature which prevents flavor deterioration and then sealed in lithographed, lacquered cans by the Martin aseptic canner. Here cans and covers are sterilized and all possibility of recontamination is eliminated. (This article continued on page 217)

all the way from cow to can



TANDEM LINES at Ridgeland, Wis., plant turn out 100 six-ounce cans per minute. This is the only Med-o-Milk plant now supplying consumer distribution. Currently, this processing plant is capable of producing 200,000 cases of Med-o-Milk—in an assortment of the three sizes—per month. Bigger volume and more mechanization will be required to make the cost of this product competitive with fresh milk.

New dimensions for cosmetics

Two leaders venture into the realm
of abstract design;
others show modern simplicity,
trend to open display

Gourielli's new fragrance line called "Fourth Dimension" leads one to wonder how strongly the influence of mobiles and other advanced modern design will assert itself in the psychological appeal of future cosmetic package promotions.

Using the theme, "add a new dimension to your life," Gourielli has designed boxes and cartons with geometric abstractions and mounts a \$45 bottle of perfume on the axis of a decorative piece of acrylic plastic sculpture so that it whirls around when you set it in motion. Eight prism-like facets form an eau de toilette bottle; two colors, red and blue, are fired into the glass of some of the facets so that they create a spectroscopic effect when the colors overlap with the light amber color of the liquid. Symbolic too of the new "time and space concept" for package design is the hour-glass shape of the "Fourth Dimension" cologne bottle.

In a more restrained way, Prince Matchabelli is also making use of abstract design for a motif which the company calls "wind swirl" on the satiny surface of a white rayon-acetate box covering for the packaging of a new perfume, "Wind Song."

These two examples may not be enough to constitute a trend, but they represent some of the boldest design ventures away from the fussy, the ornate and the nostalgic toward a new simplicity that is apparent in practically all decorative cosmetic packaging this fall. A stark black polystyrene compact which Tussy calls "Beauty Touch," for instance, is absolutely unadorned except for a single sparkling rhinestone in the center.

On these pages are illustrated a few of the hundreds of packages being introduced this month. Each has been selected for its significance in showing how packaging in the beauty field is shaping up for the holidays.

There will again be a number of the gadget novelties of polystyrene



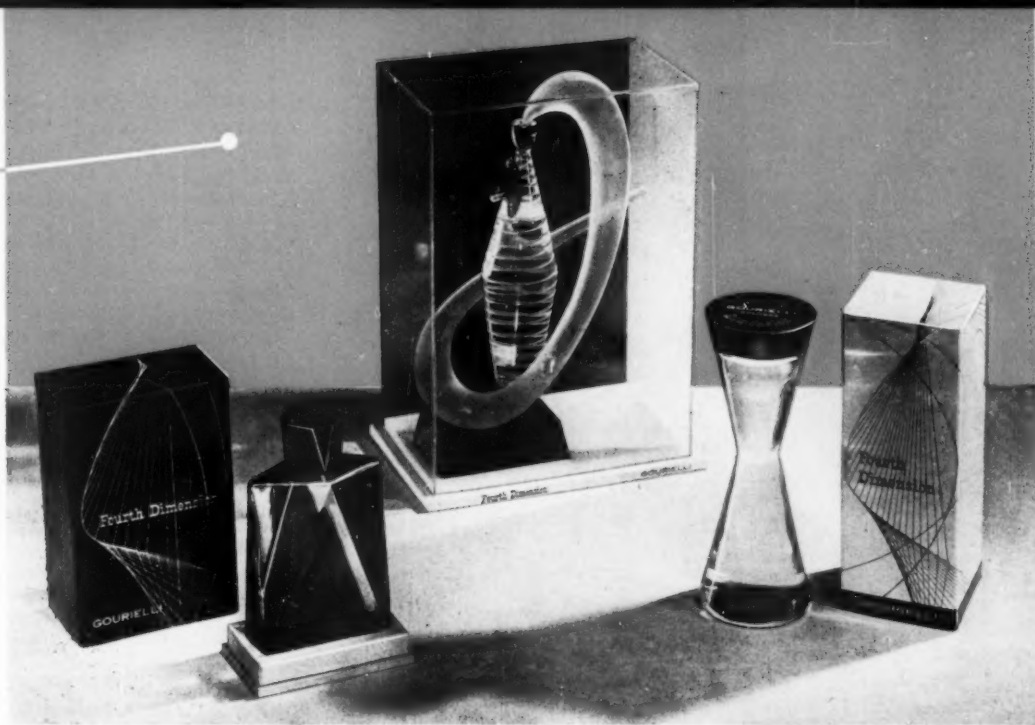
WIND SWIRL motif on Prince Matchabelli box is like the variation of lines on a weather chart. For first time this year, crown bottle is produced in willow green. Mirror effect is produced by metallic-coated acetate sheet.

foam, aluminum foil and decorative paperboard die cuts, but there appears to be a continued trend toward simpler boxing of one-, two- and three-item sets that can be steady year-round sellers, as has been noted for the past several years. This is due to high cost of packaging materials and partly to consumer preference.

Designers are making interesting new uses of transparent plastic sheet materials in combination with paper box constructions. Not only are there many of the conventional-type boxes with formed transparent covers, but there are such uses as the transpar-

ent formed dome pieces which Helena Rubinstein combines with a paperboard set-up box for her "Bath Foam Domes" which is called the "Billiard Ball Package." A clever use of metallic-coated acetate is that for the mirror effect achieved in a Prince Matchabelli display box which reflects the back of the new willow green crown bottle for "Wind Song" perfume.

More apparent than ever is the essential need for open display. The hinged box in which perfumery bottles were once fitted flat into platforms is becoming almost extinct. Practically all of today's perfume



NEW DIRECTIONS in psychological appeal of cosmetic packaging are implied by Gourielli's "Fourth Dimension," where design is based on the mathematical concept that a perfume bottle can be whirled on the axis of a decorative piece of acrylic plastic sculpture, a faceted multi-color bottle can refract the colors of the spectrum.

boxes show the bottles in upright position when opened.

A great deal more attention is being paid to space-saving counter units. By using set-up box construction that angles the contents toward the shopper, Pond's has made an effective display of a decorative packer for 18 gift-boxed Angel Face Mirror Case units in an assortment of seven shades. With an attention-getting unit

STARK BLACK polystyrene compact for Tussy "Beauty Touch" is unadorned except for the sparkling rhinestone in the center.



that looks like a swatch of tweed cloth, Lenthieric gets a self-selling display of 12 Pippin Red Sta-Put lipsticks combined with sample vials of Tweed perfume in strategic locations.

Early fall showings indicate a renewed interest in men's lines. The trend to simplicity in such packaging is revealed in the very modern treatment of traditional design themes, such as the heraldry for Alfred D. McKelvy's "Black Watch" line against bright, shiny red box coverings, and the playing-card motif on a Courtley gift box for after-shave lotion and cologne called "In the Cards."

Fitted cases and handbags equipped with various assortments of cosmetics for gift selling are again being offered by several houses. They appear to be designed with a new sense of good taste and functionalism for the recipient—and a little easier on the gift-giver's pocketbook, too.

An indication that the cosmetic houses, like the food and soap manufacturers, are taking serious note of the importance of "getting 'em young" is found in the Harriet Hubbard Ayer doll which comes packaged with a doll-size version of mother's vanity table—a paperboard box designed like a dressing table on which



MODERN TREATMENT of the traditional is revealed by simplified heraldry used for new McKelvy "Black Watch" men's line and Courtley's "In the Cards" gift box for men's after-shave lotion and cologne.





DISPLAY INGENUITY has never before been so necessary. Two eye catchers for small space are illustrated by Lenthier's "Tweed" swatch unit for self-selling lipstick and perfume combination and Pond's set-up box packer constructed to angle the Angel Face gift cartons toward the shopper.



ACETATE DOMES are combined with paperboard set-up-box construction for novel package of Helena Rubinstein Bath Foam Domes.

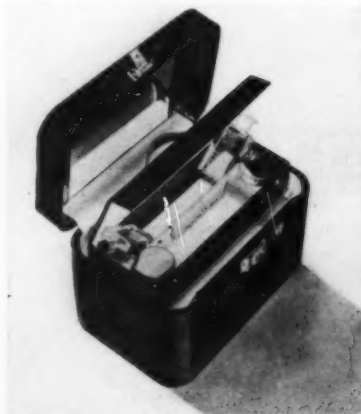
are secured by die cuts and elastic bands all the beauty essentials a doll's (or any human) face might require. Actually, the package is a sampling idea, to make little girls conscious of beauty grooming in general—Harriet Hubbard Ayer products in particular—during the impressionable pre-teen years.

CREDITS: Gourielli "Fourth Dimension"—Toilet water: Bottle and cap, Owens-Illinois Glass Co., Toledo 1, Ohio. Printing on bottle, Graphire Corp., 190 W. 237 St., New York 63. Box, J. Landovne Co., Inc., 561 Grand Ave., Brooklyn 16. Box wrap,

COSMETICS FOR DOLLS is inevitable with little girls growing up into the purse-string holders of a billion-dollar industry. Harriet Hubbard Ayer doll comes packed with paperboard box vanity table containing miniatures of Ayer beauty essentials—a sampling idea to win lifetime Ayer customers.



FITTED CASES equipped with cosmetic products are a perennial in the holiday gift lines. This very usable train case fitted with Harriet Hubbard Ayer products has a washable, waterproof lining.



Lord Baltimore Press, 1601 Edison Hwy., Baltimore 13, Md. Cologne: Bottle, T. C. Wheaton Co., Wheaton Ave., Millville, N. J. Cap, Terkelsen Machine Co., 326 A St., Boston 10, Mass. Label on cap, National Label Co., 19 & Indiana Ave., Philadelphia 32. Carton, Lord Baltimore Press. Perfume: Bottles, Carr-Lowrey Glass Co., 2201 Kloman St., Baltimore 30, Md. Acrylic sculpture and box, Just Plastics, Inc., 256 W. 65 St., New York, using Du Pont Lucite. Hang tag, The Foxon Co., 235 W. Park St., Providence, R.I. Prince Matchabelli "Wind Song"—Bottle and closure, T. C. Wheaton Co. Box, Shoup-Owens, Inc., 1100 Adams St., Hoboken, N. J. Box covering, Facile Corp., 200 Fifth Ave., New York 10. Box label, Richard M. Krause, Inc., 52 E. 19 St., New York 3. Tussy "Beauty Touch"—Polystyrene compact, Wheaton Plastics Co., Mays Landing, N.J. Alfred D. McKelvy "Black Watch"—Bottles, T. C. Wheaton Co. Closures, Richford Corp., 251 Fourth Ave., New York 10. Boxes, Kiernan-Hughes Co., 348 Ninth St., Jersey City 2, N.J. Labels, Richard M. Krause. Lenthier "Tweed"—Display, Louis Bresoud, 31 W. 21 St., New York. Helena Rubinstein "Foam Bath Domes"—Box with formed acetate domes, Shaw-Randall Co., 39 Sabin St., Pawtucket, R.I. Harriet Hubbard Ayer—Doll vanity box, Paramount Carton Corp., 79-07 Rockaway Beach Blvd., Arverne, N.Y. Fitted train case, Elgin Co., 171 Madison Ave., New York. Courtley "In the Cards"—Box, Cross Paper Products Corp., 4377 Bronx Blvd., New York 66. Labels, A. L. Reid Printing Corp., 305 Lafayette St., New York. Pond's Angel Face Mirror Case—Display box and cartons, F. N. Burt Co., Inc., 514 Seneca St., Buffalo, N.Y.

TEAR-DROP flacon of Lancome "Tresor" parfum from France is purse size, made with a ring secured in the cap so that it may be worn as a piece of jewelry when suspended on a belt or a chain.



MODERN PACKAGING



UNIFORM DESIGN of packages gives quick recognition to line, explains nature of toys by simple illustration and indicates age group.

CLOSE-UP shows detail of package. Red, blue and white trademark appears on every face of package. Illustration of toy, its name and age group appear on top panel. Description is on bottom.



30 toys under one name

Time-tested technique of family design builds brand identity and sales for Right-Time Toys

The notable success of packages that are well branded, offer adequate protection and provide the display features essential for today's self-selection selling is having a marked effect in the sharpening up of packaging techniques in the toy field.

A good example is the family of packages just adopted for the line of some 30 pre-school Right-Time Toys marketed by Childhood Interests, Inc., Roselle Park, N.J.

A former assortment of blue-and-white cartons that were scarcely distinguishable from any other manufacturer's—and which failed to indicate the nature of the toys or for what age groups they were intended—has been replaced by a series of cartons in one basic design, uniform in color and shape, but varying in size to accommodate each of 30-odd items. The packages are instantly recognizable and, when a shopper or sales person picks one up, she can tell at a glance the type of toy, the age group it is intended for, its price and how to use it.

Woodgrain background printing on the cartons suggests the hard maple wood from which the toys are made. The company trademark, "Right-Time Toys"—arranged in the form of a distinctive clock printed in red, blue and yellow—is shown prominently on all four sides of the cartons.

A simple line drawing of the toy appears in color on the top of each box together with the name of the toy and for what age group it is planned—information which is also printed on all other sides of the cartons.

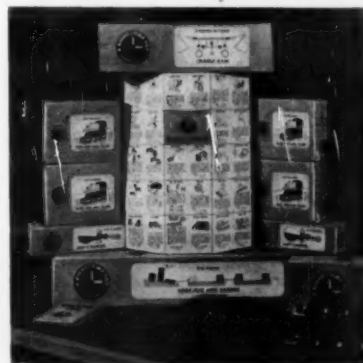
On the back panel of each carton is a white area on which is printed a short description of the toy. The packages are particularly effective in aiding the shopper to make a selection when they are grouped in display around the company's toy selector chart, which explains how the toys are designed to help the development of the child.

A perforated index-type price sticker is attached to one end of each carton. It may be removed by the

store clerk when the carton is gift wrapped. Price is repeated again on a hang tag, attached to the product inside the box in the event that the item might be removed from the container. The tag features the trademark, the name and age classification of the toy, and is equipped with a perforated price and stock-number strip that can be torn off. Salespeople commonly remove the perforated strip for use in controlling inventory, which helps to prevent running out of stock.

CREDITS: Printed folding cartons, Downingtown Paper Box Co., Downingtown, Pa. Tags, Parish Press, Inc., 333 Hudson St., New York 13. Toy selector chart, R. R. Heywood Co., Inc., 263 Ninth Ave., New York 1.

TOY SELECTOR CHART aids shopper in making correct choice of toy and is an aid in building counter package displays.





Lotion displays directed to three specific markets

An adroit part of the planning of the million-dollar consumer advertising campaign for Pond's Extract Co.'s new Angel Skin hand lotion is point-of-sale material directed specifically to three principal outlets where the product is sold: drug stores, food stores and variety stores.

Illustrated is a 4-ft.-high floor stand for jumble display of the product in self-service-selling grocery outlets, topped with a detachable red and white 9-in. bull's-eye featuring price of the two sizes of bottles. Banners across the base are identical in design to two strip-gummed streamers available to dealers for use on windows or doors.

For drug stores there is a giant 10-oz. pump-dispenser sampling unit mounted on a full-color lithographed counter stand and a realistic pyramid unit reproducing the bottles for counter or window use. The pyramid is also available for variety stores, plus special back-bin cards using the scientific approach why Angel Skin is a "revolutionary new lotion with deeper softening action" which is "scientifically years ahead."

CREDIT: Oberly & Newell Lithograph Corp., New York.

DISPLAY



Motion shows the stretch

A 300% increase in the sale of Interwoven's Flexible Socks has been attributed by a New York store to this striking motion and illuminated display. The unit shows at a glance how the sock, which comes in only three sizes, stretches to fit the foot. This stretching action is visually demonstrated continuously by two socks, each on wood forms with attached metal rods that extend to a motor in back of the display. The sock at the top shows lengthwise stretch, while the lower one shows stretch in width. The same motor operates the motions of both socks simultaneously. At the top of the unit, lighting is provided from behind a piece of bent plywood, covered with buckram fabric, which is die cut to hold a piece of formed translucent vinyl carrying the trade name. The card resting on the buckram-covered base is of composition board, white sprayed and silk-screen lettered. The card carries sell copy and also serves to hide part of the bottom sock. Merchandise can be displayed on the base.

CREDIT: Display, Merit Displays Co., New York.

Packaging's Hall of Fame goes on coast-to-coast tour

Jules Montenier, Inc., is spearheading a national promotional program for Stopette Spray Deodorant based upon the product's selection by MODERN PACKAGING for its *Packaging's Hall of Fame* series (see "Stopette Spray Deodorant," MODERN PACKAGING, April, 1953, p. 136). This paperboard window display about 3 ft. square, resembling a framed painting, reproduces in full color the Kodachrome cover illustration on MODERN PACKAGING's April issue, showing Dr. Montenier in his laboratory. A ribbon-like banner across the top of the display proudly points out that Stopette Spray Deodorant has been "Awarded 'Hall of Fame' Honors!" In the lower left corner is a reproduction of the April issue of MODERN PACKAGING, followed by the explanatory copy, "As seen in Modern Packaging." A reproduction of the Stopette polyethylene bottle appears at the lower right. The display has been installed in 6,600 drug stores across the country where it is assured at least a month's run. Letters and telephone calls to the company indicated that the display was arousing considerable interest in the field.

CREDIT: Display printed by Bruce Offset Co., Chicago.



GALLERY

Girl in the bath tub sells Aquamarine luxuries

Revlon Products Corp.'s three-dimensional glamour bath-tub display is an eye-stopper in drug-store windows. The unit promotes Revlon's entire line of Aquamarine cosmetic products. The tub is aquamarine in color, tying in with the distinctive color of the products and packages in the line. The display, shipped flat, comes in several pieces that are die cut and scored for easy setting up. A decorative design in color is printed on the sides of the tub; its curved top is white. The glamour figure is a full-color flat sheet of board, which fits into another flat sheet, printed to resemble water, that rests inside the top edge of the tub. Various packaged products may be arranged on the "water." Additional supplementary pieces are available such as the stand with flag (illustrated), background reproducing tile bathroom walls, shower curtains, etc.

A smaller version of the display measuring about 12 or 14 in. is supplied for counter use.

CREDIT: Display, Leon L. Berkowitz & Co., Philadelphia.



Foil-wrapped ice cream

Aluminum packaging has advantage of reflective insulation;
provides new display appeal and greater consumer convenience

Brightly printed aluminum foil made its debut as an ice-cream packaging material this summer, when the Central Ice Cream Co., Chicago, introduced its new aluminum "insulator" package will full-page newspaper advertisements in color. Central's interesting new package, believed to mark the first use of foil in this field, consists of a printed foil overwrap applied to four individually packed servings of Highlander Diced Cream, each containing 3.2 fluid ounces of the product. The foil gives merchandising sparkle to the packages and has the advantage of reflective insulation and other functional properties inherent to the material.

Each complete package measures approximately 7½ in. long by 2 in. square and fits conveniently in the freezer compartment of the home refrigerator. Initially, the new package is being introduced in three flavors—chocolate, strawberry and vanilla—with butter pecan and orange sherbet to be added later. The foil wraps, made with a heat-sealing type of waxed-paper backing, are rotogravure printed in five colors, with an

appropriate background hue used for each flavor. The end panels of each package and the bottom panel on which the lengthwise seam is made are printed in the colorful red, green, blue and brown plaid design keynoting Central's Highlander ice cream.

The reflective insulating properties of the foil overwrap, augmented by the additional protection of the waxed-paper inner packs, help to reduce "heat shock" and melting of the ice cream when it is being carried home from drug stores, supermarkets and other retail outlets, the company says. The dead-folding characteristics of the foil provide convenience, since the user may open it easily, withdraw as many of the diced portions as needed, then fold the foil back tightly around the remaining inner cartons. This saves refrigerator space and adds to product protection.

Central's adoption of the new foil-wrapped package grew out of consumer demand for a small sales unit which would permit greater choice of flavors in purchasing the unit portions. Central is still marketing a 10-unit pack of the diced cream in a printed paperboard container, but it

is believed that the new four-unit package will have even greater sales appeal, particularly to smaller families. If a group larger than four is to be served, the housewife can conveniently purchase several of the packs in various flavors. Retailing at 29 cents each, the packages can be easily stored for future use in the refrigerator freezer compartment.

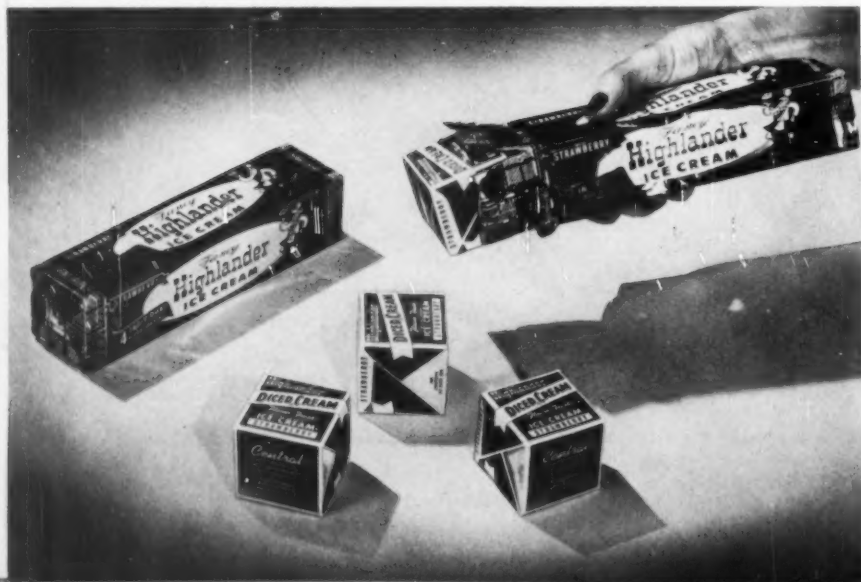
A further convenience to the consumer is the use of the patented inner packages which eliminate slicing, spooning or waste of the product in the home.* The flip-out feature of the individual cartons permits quick serving of equal portions without touching the product and with no silver to wash. The perfect cube form in which the product emerges from these inner packages is said to be ideally suited to the preparation of attractive, taste-appealing sodas, sundaes, banana splits and other ice-cream desserts. The inner packs, made of a single sheet of 8-pt. waxed paper, are printed in red, featuring the Highlander Diced Cream name and the product flavor. A pointing-hand illustration on the top panel indicates where the packages are to be opened. Filling of the individual packs is handled on specially designed equipment.

The foil overwraps are applied automatically from continuous rolls on equipment which assembles four of the inner cartons, cuts off an individual wrapper, overwraps the packages and heat seals the wax-backed foil at each end and along the bottom seam. The overwrapping operation is handled at a rate of approximately 44 finished packages per minute.

CREDITS: Printed foil (Reyseal) overwraps, Reynolds Metals Co., 2500 S. Third St., Louisville 1, Ky. Wrapping machine, Globe Co., 4000 S. Princeton Ave., Chicago. Inner wraps for individual diced cream portions, Western Waxed Paper Div., Crown Zellerbach Corp., 2101 Williams St., San Leandro, Calif.

* See "Arden's Diced Cream," MODERN PACKAGING, NOV., 1948, p. 100.

FOUR DICED SERVINGS are wrapped in plaid-printed, waxed-paper-backed foil. Idea grew out of demand for smaller unit that would permit greater choice of flavors. Package size fits refrigerator storage compartments.



Prestige Products

Packaged by **BURT**



Packages for
Bourjois, New York

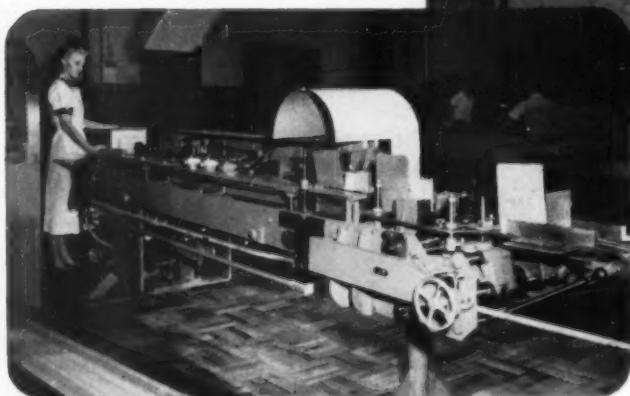
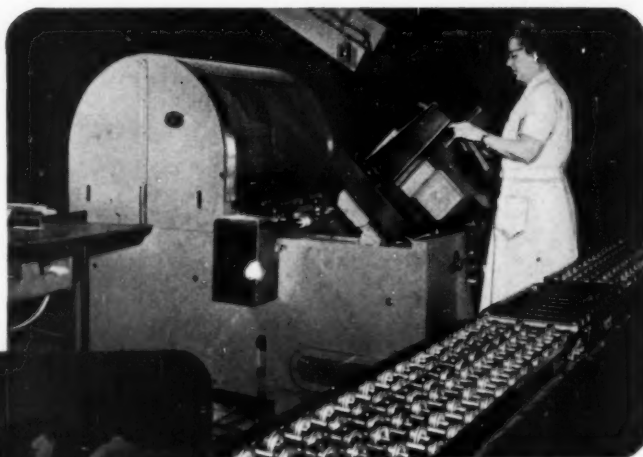
F. N. Burt Company Inc. • Manufacturers of Small
Set-up Boxes, Folding Cartons and Transparent Containers
500-540 Seneca Street, Buffalo 4, New York
Offices in Principal Cities Or Write Direct
Canadian Division: Dominion Paper Box Co. Ltd.,
469-483 King St. W., Toronto, Canada

Pacquin's[®] Carton Set-up

may suggest New Savings for you

Model PA Carton Former

Pacquin's cartons, shown below, are made on our PA machine from inexpensive die-cut blanks. Cartons leave the machine right-side-up and are conveyed to filling stations. The machine is adjustable for different sizes.



Model PC Carton Closer

automatically closes the tuck-top lids of the cartons after they have been filled. Cartons are conveyed automatically from filling stations.



Like Pacquin, manufacturers in many fields are now making their cartons on our Model PA Carton Former. This machine forms and glues die-cut blanks, producing finished cartons at speeds up to 102 a minute. Really impressive savings are made over the cost of buying factory-processed cartons or semi-finished cartons that are set up by hand.

The PA machine is adaptable to many different styles of cartons, including attractive display types. Uses any kind of carton stock—even corrugated material. The only attention it requires while operating is to keep it supplied with blanks and adhesive.

The PC Carton Closer automatically closes tuck-top cartons with or without an inner glassine liner. It is adjustable for size and has a speed of up to 102 cartons a minute.

*Write for literature on the
Model PA and PC machines*

**PACKAGE
MACHINERY COMPANY**
SPRINGFIELD, MASSACHUSETTS

NEW YORK CHICAGO BOSTON CLEVELAND ATLANTA DALLAS DENVER LOS ANGELES SAN FRANCISCO SEATTLE TORONTO MEXICO, D.F.

TECHNICAL

ENGINEERING • METHODS • TESTING

Charles A. Southwick Jr. • Technical Editor

Antioxidants for food papers

Butylated hydroxyanisole shows
unusual effectiveness as an
inhibitor of rancidity in fats
and fatty foods. By R. W. BENTZ*



PILOT-PLANT COATER illustrates the roll method of applying an aqueous emulsion of Tenox BHA to parchment.

During the last decade, the manufacturer of paper containers and wrapping papers has developed an increasing demand for his product. In so doing he has greatly reduced the cost of packaging and provided a container which is more economical, more convenient and more attractive. There are, however, several limitations to this type of packaging insofar as fats and fat-containing foods are concerned.

All animal and vegetable fats and oils, particularly those which are most tasteful and of greatest nutritive value to man, are susceptible to oxidative rancidity—the development of un-

pleasant taste and odor caused by the action of the oxygen in the air. This susceptibility not only affects fats and oils as such, but limits shelf life of products in which they are used.

Wrapping papers can accelerate rancidity in at least three ways: (1) metallic contamination, (2) increased surface area, (3) admission of light.

Paper usually contains trace amounts of pro-oxidative metals. As little as 10 parts per million of iron or copper will reduce the keeping time of fats and oils by as much as 50%. This applies proportionately to fatty foods as well.

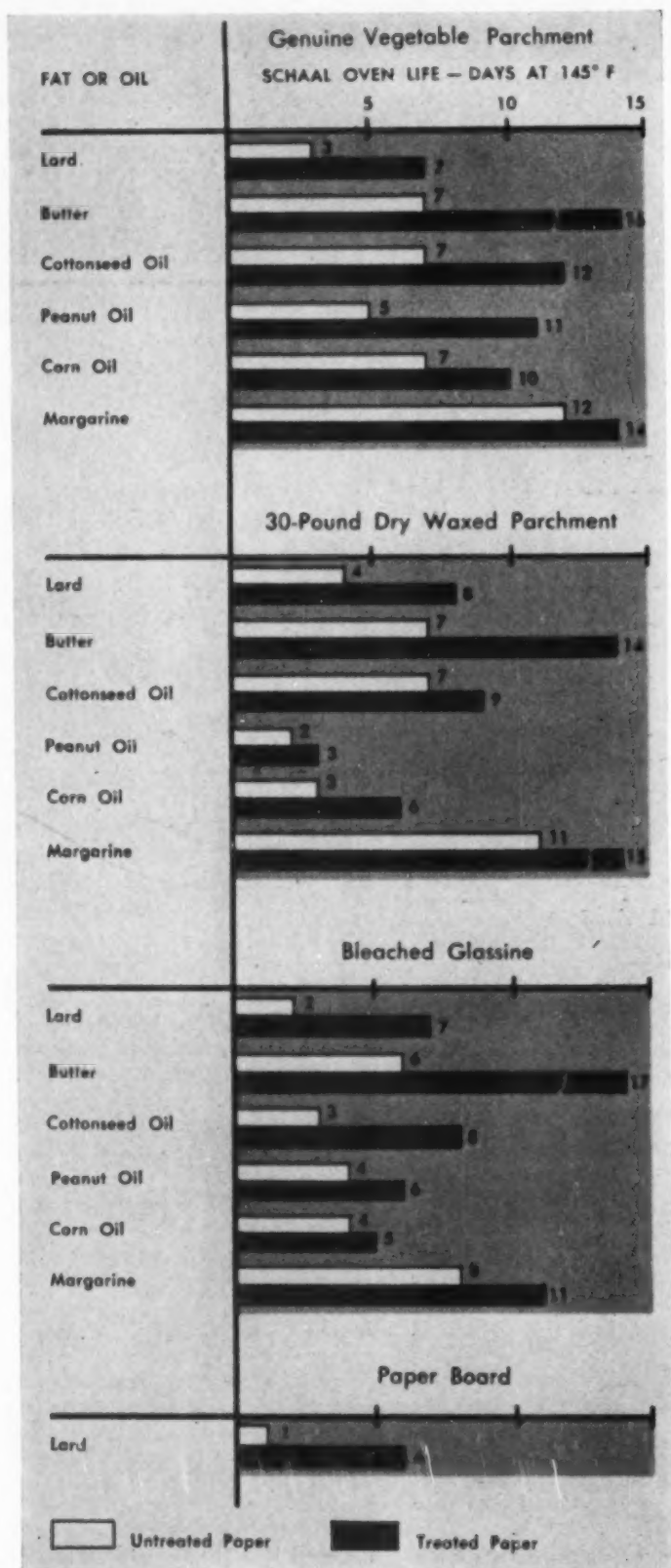
In bulk form, fats and fatty foods expose a relatively small surface area and are not overly sensitive to oxidation. In the packaged state, however,

the fat is absorbed by the paper and diffuses or spreads to expose to the air a very large surface area per unit weight of fat. Thus, the fat readily develops the typical unpleasant odor and taste characteristics of oxidative rancidity. Not only is this condition aggravated by the greatly increased surface area of the fat, but it is further catalyzed by the direct contact of the fat or oil with the pro-oxidative metals in the paper.

Many packaging materials adversely affect the keeping quality of fats and fatty foods by the admission of light. The photochemical effect of absorbed light catalyzes oxidation.

For the past two years Eastman Chemical Products, Inc., in cooperation with manufacturers of parchment,

* Chemical Sales Development Laboratory, Eastman Chemical Products, Inc., Kingsport, Tenn.



GRAPH BARS show longer rancidity-free periods for typical fats and oils when parchment, glassine and paperboard treated with Tenox BHA are used. Results given above are from laboratory Schaal Oven tests.

glassine and paperboard, have done considerable work to determine the benefit derived from packaging materials treated with antioxidants.

During the course of this work, Tenox BHA—Eastman's trademark for food-inhibitor-grade butylated hydroxyanisole—was found to be the best suited for most paper applications. The unusual effectiveness of Tenox BHA-treated paper on the shelf life of representative fats and oils is depicted in the graphs. These stability characteristics are obtained without affecting the drying of printing inks or the grease resistance of the treated papers.

The treatment of paper with butylated hydroxyanisole provides the food processor with an answer to the problem of storage life. Through the use of paper so treated, he can now ship to distant marketing centers fully confident that his products will retain their fresh, rich flavor long after they have reached the consumer's shelf.

For unwaxed papers

Laboratory and commercial tests have established the ease with which these antioxidants can be applied to parchment, glassine and paperboard. Effective results can be obtained by treating the unwaxed paper with 0.05-0.10% of Tenox BHA. The addition of 0.02-0.05% citric acid often sequesters such contaminating metals as iron and copper to enhance the effectiveness of the antioxidant. On the other hand, because of its reactivity with metals, citric acid should be used with caution; it may introduce more metal than it complexes.

The addition of 0.02-0.03% Tenox PG—Eastman's trademark for food-inhibitor-grade n-propyl gallate—also is advantageous in some applications, but it, too, must be used with care. Propyl gallate often reacts with iron to form a blue-black compound which discolors the paper. The use of stainless steel equipment, of course, eliminates the difficulties encountered with these synergists.

These antioxidants can be easily applied to paper by conventional methods; no additional equipment is needed. An aqueous emulsion is used, its concentration adjusted to the "pick-up" of the paper so that the desired amount of antioxidant is obtained.

Since butylated hydroxyanisole is susceptible to steam distillation, it should be applied with a minimum of

water and as late as possible in the drying operation; only enough drying rolls should remain to vaporize the added water. Three methods of treating unwaxed paper with an aqueous emulsion are: (1) tub method, (2) roll method, (3) spray method.

Tub method. The partially dried paper is passed through a tub bath located about three-fourths of the way along the drying rolls. This method is most convenient, but can easily result in the application of too much water and resulting steam distillation of the antioxidant.

Roll method. The emulsion is applied to the paper by contact with the top of a wet, rotating roller which is partially submerged in an emulsion bath. It enables closer control of the applied water, but permits treatment of only one side of the paper. A feed pipe, however, can be used to pour a stream of the emulsion on the top side of the paper to treat both sides simultaneously.

Spray method. The emulsion is sprayed on the paper during the very last stages of drying or immediately after the final drying operation. This method has the advantage of enabling treatment of both sides of the paper with a very minimum application of water. So little water is applied that it is usually unnecessary to dry the paper further.

If the paper is calendered, the emulsion of Tenox BHA can be added with the dampening water. Since the paperboard manufacturer is reluctant to add water to a partially dried board, the treatment of paperboard is accomplished by applying the emulsion in the water boxes on the calender rolls.

Cellophane can be treated with Tenox BHA by similar methods if an organic solvent solution is substituted for the aqueous emulsion.

For waxed papers

After refining, paraffin wax frequently is maintained in a liquid state for several weeks. Under these conditions rapid oxidation is inevitable unless an antioxidant is used. Tenox BHA should be added to the wax immediately after it is refined or as soon as possible after it reaches the converter.

Butylated hydroxyanisole readily dissolves in molten wax and requires only a minimum of stirring to assure its uniform distribution. After its addition, the paper can be waxed in



SCHAAL OVEN TEST is used to determine organoleptically the relative keeping qualities of fats and oils in contact with untreated and treated papers. A circle of paper is placed on the bottom of a glass container. A weighed amount of fat is spread over the paper and the container is loosely covered. The test sample is placed in a convection-type oven at 145 deg. F. and examined twice daily for unpleasant odor of oxidative rancidity.

accordance with usual processing procedure. It is not necessary or desirable to treat the paper or paperboard prior to waxing. In this case the wax has become the solvent for the impregnation of the paper with butylated hydroxyanisole.

If the main interest is to stabilize only the paraffin wax, Tenox BHA can be used at 0.005-0.010% concentration, based on the weight of the wax. To protect fats and fatty foods packaged in paraffin-coated paper, larger concentrations are necessary. Enough of the antioxidant should be dissolved in the wax to provide a 0.050-0.100% concentration, based on the total weight of the waxed paper (wax plus paper); the amount of antioxidant dissolved in the wax will vary, of course, with the wax load carried by the individual paper.

Among the products suggested as

suited to the use of papers treated with antioxidants are: bacon, biscuit mix, bread, butter, cake mix, cakes, candy and gum, cereal, cheese, cocoa, coconut, coffee, cookies, corn curls, crackers, cracklings, dehydrated soup, dessert powders, donuts, fish, frozen foods, ham, hamburger, ice cream, lard, milk, nuts, oatmeal, oleomargarine, pastry mix, popcorn, potato chips, poultry, powdered milk, pretzels, rolls, sausage, shoestring potatoes, shortening, sweet buns, tea and waffles.

Manufacturers of packaging material who have cooperated in this research include the Kalamazoo Vegetable Parchment Co., Kalamazoo, Mich.; Nicolet Paper Corp., West DePere, Wis.; Michigan Carton Co., Battle Creek, Mich.; Reynolds Metals Co., Richmond, Va., and The Alton Box Board Co., Alton, Ill.

CHEMICAL ANALYSIS serves to confirm the presence of rancidity in the product by determining the peroxide content.



Water-barrier materials

Basic considerations in the choice of waterproof papers for case liners and barriers.

By M. L. DOWNS*

It is difficult to say where waterproof barrier standards end and water-vaporproof standards begin. Actually, all water barriers have a good measure of water-vapor resistance. But, let us assume that we are discussing primarily the resistance to the penetration of water in the liquid state and, if those barriers also happen to have a good measure of resistance to the penetration of water in the vapor state, so much the better.

Until a few years ago, because of the fact that practically all waterproof papers were made by asphalt lamination, coating or infusion, the term "waterproof paper" came to be synonymous with "asphalt papers" and, in the field of paper production and packaging, the term "waterproof papers" is still generally considered to mean asphalt grades. Currently, however, the concept is changing and, with the advent of plastics in volume, sheets coated or laminated with synthetic elastomers are also being grouped with waterproof papers. This includes grades coated with polyethylene—by far the largest volume other than asphalted in the waterproof and case-liner field.

Returning to the subject of water resistance versus water-vapor resistance, further discussion may be in order at this point. In actual use, if a wrap is supposed to be completely watertight, then any minor mechanical defect in the body of the sheet or the closures can show serious water leakage, whereas if mechanical leakage is a small one, the relative water-vapor transmission on an area basis may be still very low. On the other hand, if a waterproof sheet is made with insufficient laminant and its water-vapor transmission is relatively high, water vapor can slowly diffuse through the barrier and actually con-

dense as liquid water in the interior of the pack. Therefore, in order to be a truly waterproof pack, the barrier must not only be mechanically tight, but also reasonably water-vaporproof. Government and Armed Services specifications call for checking the water resistance by means of the dry-indicator method (TAPPI Procedure T-433m). This procedure utilizes a watch glass sealed over the top of the specimen with the specimen floated on water. The test ostensibly checks only the water resistance, but in reality water vapor diffuses through the sheet and condenses under the watch glass so that, in effect, the test checks the combined water and water-vapor resistance of the barrier. There is a rough approximation between the number of hours of water resistance obtained by this test procedure and the water-vapor transmission as measured by procedures such as the General Foods Cabinet Method and that rough correlation is shown in Table I.

TABLE I—APPROXIMATE RELATIONSHIP, WATER VS. WATER-VAPOR PENETRATION OF WATERPROOF BARRIER SHEETS

Water penetration, uncreased sample, hours resistance by "dry indicator method" (TAPPI T-433m)	Water-vapor-penetration, uncreased samples, gm./100 sq. in./24 hrs. 95 RH-ORH 100°F., General Foods Method
15	4.5
25	3.5
35	2.5
45	2.0
100	1.0

Let us look at the reasons why asphalt has been the most generally used waterproofing material in waterproof papers in the past. Its advantages are as follows: It is a material extremely water insoluble and, therefore, high in water resistance. One of its prime assets is its extreme economy. All the asphalts used in water-

proof papers today are petroleum refining by-products and are available made to specifications, in tank-car lots at prices below any other available waterproofing materials. Asphalt has other advantages, such as relative ease of handling as a hot melt, with considerable background in its handling and with coating and laminating machines available in wide widths not only for low-cost production, but also to produce unseamed large areas for bags, liners, shrouds and similar uses.

Asphalt as a waterproofing medium does have certain disadvantages, the primary one being lack of low-temperature flexibility. It also shows softening and bleeding at elevated temperatures and, in some cases, its tendency to stain, its dark color, the asphaltic odor and oil-bleeding characteristics are objectionable. In spite of those difficulties, however, its waterproofing properties are so economical on a dollar basis that the disadvantages may frequently be overlooked.

One factor of importance not always given proper credit is the fact that asphalt has cold-flow characteristics and, unless barriers have been severely shattered at low temperature, they have a tendency to reseal themselves and maintain good waterproofness.

The waterproof paper industry has long been aware of the shortcomings of asphalt. Thousands of manhours in the laboratories of the suppliers, as well as the users, have been spent on trying to find the modifying agent which might produce in asphalt good low-temperature flexibility. However, no such blending agent has been found. Consideration has been given to many other alternate materials. Formulations based on waxes usually bleed at relatively low temperatures; those based on resin-type materials either are brittle or show bad plasticizer migration. The same is more

* Thilmany Pulp & Paper Co., Kaukauna, Wis. From a paper read at the Joint Industry Conference on Packaging and Preservation, Michigan State College, East Lansing, Mich. April 9-10, 1953.

or less true of many of the synthetic elastomers. Certain of the synthetic rubbers can only be applied satisfactorily from emulsion form and films must be heat fused to produce water resistance. When solvent application is used, solvent costs and recovery expenses are high. Where organosols and plastisols are used, very frequently plasticizer migration is a serious problem. Thermosetting resins, such as polyesters, present serious technical problems, such as the necessity for shutting off air from the resin during cure. Barriers incorporating metal foils, in addition to their high cost, present the problems of limitations in widths of foil, relative structure weakness of the thin metal foils and the high cost of combining them with other protective materials in order to obtain mechanical strength. It was not until polyethylene appeared on the scene that any good alternate to asphalt was available to the waterproof paper industry.

Polyethylene has almost all of the desirable characteristics for waterproof protective papers. Our Sales Department says that, so far as it is concerned, polyethylene in protective papers has only five disadvantages and they are: cost, cost, cost, cost and cost.

The advantages of polyethylene are numerous. In the first place, it has ideal low-temperature flexibility,

perhaps better than any other easily available product, and this low-temperature flexibility is obtained without the incorporation of plasticizers. It lends itself to hot extrusion without the necessity for going through emulsification or solvent solution. Because it can be extruded in wide widths, its application cost is relatively low in contrast with many other synthetic elastomers. Hot extrusion can then be self bonded to paper and the resulting combination gains mechanical strength from the polyethylene and the stretchable character of the film helps to distribute stress loads on the carrier material. Other advantages, such as chemical inertness, relatively good oil resistance, excellent heat-sealing characteristics, freedom from odor and taste, make polyethylene a very logical choice for waterproof papers wherever the cost can be justified.

Aside from the problem of cost, the inertness of polyethylene has prevented its use where fabricators would prefer to use a pasting operation. There are some adhesives which are quite satisfactory for adhering poly to paper, but even the best of the adhesives are not too satisfactory on polyethylene to polyethylene. This means that seals and closures should be done by means of heat sealing and on heavy weights of paper, and polyethylene special heat-sealing equipment is necessary. Per-

haps, however, this is actually an advantage insofar as it puts the fabrication into the hands of people with adequate facilities and, particularly in the instance of waterproof case liners, good heavy heat seals are necessary if laminations are to stand a water-filled test.

The general use of waterproof papers in the packaging and case-liner field is quite familiar. End uses are shown in both joint Army-Navy Specification JAN-P-125 and also in Federal Specification UU-P-271b. Many of the uses represent shrouding types where the sheet is not actually sealed completely, but does give a good measure of resistance to wetting from rain. Such uses include shrouds over machinery, liners inside crates and cases, creped waterproof papers used in baling, temporary tarpaulins and similar uses. Waterproof papers are quite frequently used as separate shrouds or wraps over critical portions of equipment to prevent rain damage. In a number of cases, waterproof sheets are incorporated as barriers in multiwall bags, fibre drums and fibre boxes. Small waterproof envelopes are used for protecting individually packed items, shipping instructions, bills of lading, etc. One of the major uses is, of course, in the form of case liners where the liner is usually prefabricated in the form of a pouch or bag designed to fit the particular case and, in some in-



TYPICAL CASE LINER of the L-2 asphaltic type and waterproof envelope for setting-up instructions made from C-1 type waterproof paper. While asphalt is still the most common waterproofing material, polyethylene coatings are coming up fast wherever cost permits.



TYPICAL SKID MOUNT for upholstered furniture, illustrating the use of machine-creped, reinforced, non-staining laminated paper. This type of lamination is used for civilian shipment of furniture.

stances, designed to go over an inside box packed in an outside case. Usually, in the case-liner type of application, waterproof adhesives are used on the seams and closures, or the case liner is heat sealed into a Type I high-top construction waterproof case liner which can also be heat sealed before the final foldover in making the waterproof pack. Practically all of the applications of case liners and their types of construction and closures are diagrammed in Military Specification MIL-L-10547a.

Packaging people who are familiar with waterproof paper only through their contact with Armed Services specifications are sometimes confused as to why the waterproof-paper industry should offer so many combinations and weights. The answer lies in the diversity of applications of waterproof-paper grades. Light-weight combinations, such as 30-30-30—the two outside numbers designating the kraft sheets on a 24x36-500 ream basis with the center figure representing asphalt on the same basis—were at one time used for many applications, but they are obviously too light in weight for heavy-duty use. Such light combinations do, however, find quite general use in small envelopes or bags for protecting instructions accompanying shipments, barriers in certain smaller duplex bags or multiwall bags, and other uses where only moderate protection of water is required and where a light-weight sheet is needed for easy fabrication. From force of habit, some of the users of asphalt waterproof paper slipped into the thinking that 30 lbs. of asphalt are enough for

any purpose, but this is obviously incorrect.

It is quite obvious that, if either good water or water-vapor resistance is required, sufficient weight or caliper of asphalt must be provided to block off any fibres which may wick across the barrier. It is obvious that, if good protection is required, it is false economy to consider any less than 50 lbs. of asphalt per ream as a starting point and currently used specifications take that factor into consideration. The water-vapor resistance curve shows a marked increase when the weight of asphalt reaches and exceeds this amount.

The choice of weights of papers, whether or not the combination is to incorporate stretch, and the choice as to the inclusion of reinforcing materials between the plies depend entirely upon the end use. It is usually not desirable to use papers of any heavier weight than the load conditions demand, because of the increased difficulty in fabricating stiffer sheets. Reinforcing is incorporated where resistance to tear is important, particularly in shrouds and wraps. In many instances the incorporation of wet strength into the base papers and in other cases also moldproofing is desirable.

Case liners present some unusual problems. They have to be fabricated to fairly close dimensional tolerances and yet should have sufficient stretch to take the stress of racking of the case and shifting of the contents when in use. This problem received particular attention during World War II and the results were reported in Bureau of Standards Publication M-182 entitled "Development of Standards for Flexible Case Lining Material." This work pointed up particularly the importance of having sufficient laminant in the barrier to provide good water resistance and the necessity for incorporating a certain amount of stretch so that the case liner would not be damaged from racking during shipment.

When going from the consideration of asphaltic-type waterproof paper and case liners to those made with polyethylene by the lot-extrusion method, the figures for the basis weight of waterproofing poly can be revised as compared with the figures for asphalt. Polyethylene lends itself to coating one side of the sheet and, in general, it is desirable to use it as a coating rather than a lamination,

from the standpoint of economy, because if a second sheet is pressed into the face of the poly to produce a lamination, the effective fibre-unpenetrated thickness of the polyethylene is reduced and a higher basis weight of polyethylene is necessary to obtain equal water resistance. Good water and water-vapor resistance start to appear when coat weights range from 15 to 20 lbs. or from 1 to 1½ mils. However, because of the limitations of the extrusion operation, a maximum variation of ⅓ of a mil is not outside of good commercial practice on wide extruders, so that 12½-mils average is not unrealistic when considering a good waterproof barrier. However, other factors are to be taken into consideration, such as the mechanical strength of the film, its bonding to the base stock and a sufficient volume on the surface of sheet to flow adequately under heat-sealing conditions to produce good watertight seals of adequate strength. Commercial practice has shown that, on case-liner stocks, no less than 2 mils of polyethylene are necessary and, if the sheet has incorporated stretch, the irregularities usually require that additional polyethylene weight be used in the coating. For larger case liners, it is entirely likely that not less than 2½ mils of polyethylene as a coating on paper will be satisfactory.

The problem of absolutely watertight case liners which maintain their protective properties at low temperature has long been on the agenda of the various packaging groups of the Armed Services. The Quartermaster Corps has an association of suppliers known as the QMC Associates and the Packaging Division of that group recently formed a case-liner subcommittee to tackle this problem again. The Quartermaster Corps is particularly concerned about its packaging which may be at any time required to stand Arctic service. The Associates case-liner committee is currently conducting tests at the Chicago QMC laboratories trying to establish whether or not polyethylene-coated types of case liners will be the answer to this problem and the tests are being conducted in parallel with similar tests on the asphaltic types of case liners currently in use. It is entirely possible that in this instance the additional cost of polyethylene types will be more than justified on the basis of additional serviceability.



MACHINERY loaded on flat car illustrates the use of E-3-type reinforced temporary tarpaulin stock over a wooden frame.



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The 6-ounce Duraglas stock-mold bottle #A-4771, you see here, has an Empress closure. These Duraglas rounds offer a family range of 1/2-, 1-, 2-, 4-, 6-, 8- and 16-ounce sizes.



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Questions & Answers

This consultation service on packaging subjects is at your command. Simply address your questions to Technical Editor, Modern Packaging, 575 Madison Ave., New York 22, N. Y. Your name or other identification will not appear with any published answer.

Plastic bottle screw caps

QUESTION: We use several different types of plastic bottles and tubes, all having screw caps. It is necessary for us to use the caps interchangeably with the different bottles. As a result, we sometimes have poor fits and are unable to get good seals. Can you suggest a universal specification for our caps to eliminate these variations?

ANSWER: The caps which you have been using were probably made for glass bottles which have a finish that is hard and does not distort under pressure. When these same caps are used on plastic bottles a slight difference in the tolerances between the cap and the bottle finish can result in a poor fit. When this occurs with a plastic bottle, the cap threads can cause the bottle finish to distort and under extreme conditions the cap would loosen or even could be turned free.

There is no universal specification for cap threads that would solve this problem, but you may find that there are some manufacturers using a deeper type of thread, which would be an advantage with a plastic bottle. Then again, if the plastic bottle finish has deeper threads and a flat surface of engagement, then it is possible to obtain greater top pressure and still have an easily turning cap without danger of leakers.

Heat sealing carton wraps

QUESTION: We are making tests on the use of carton wrappers having a polyethylene coating on the under side to enable heat sealing of the ends of the wraps. We are having many problems because of poor seals and also encounter many variations in seal strength. What is the best method of making this type of end seal?

ANSWER: A carton wrapper with

multiple folds on the ends presents many heat-sealing problems for a resin such as polyethylene. This resin has a very narrow heat-sealing range in comparison with other resins or resin formulations. This narrow sealing range, plus the multiple folds, could make the problem insoluble unless two changes are made.

First, it will be necessary to broaden the heat-sealing range of the resin and also to develop special machinery and techniques to get precise temperature control, the maximum dwell time and adequate cooling for making the end seals.

A polyethylene resin can be modified by the addition of petroleum waxes, other hydrocarbon resins, or by mixing several different grades of polyethylene resins. There are many possible combinations of materials that modify polyethylene to produce a resin blend that will operate satisfactorily in the coating process and yet which will heat seal over a wider range of temperatures. Certain modifying agents also increase the viscosity of the fused resin, which helps reduce the penetration of the resin into the paper, resulting in their being lost from the sealing area.

The selection of an improved resin or resin blend is an important step, but these resins must be used with a heat-sealing means which is especially designed for this use. In general, a heat sealer for end seals should have heating surfaces large enough to cover the ends completely. It should be uniformly heated and controllable by the best possible temperature control.

The sealing should be done at the lowest possible temperatures and with the maximum time of contact. The sealing pressure should be only sufficient to insure a firm contact of all the folded and sealing surfaces. Cooling of the seals is recommended and the sealed area should not be

disturbed or the package released until the resin in the sealed zone has hardened.

Breaks in foil envelopes

QUESTION: One of our products needs a small foil envelope which is made with heat-sealed sides and top. We are using a light-weight foil mounted to paper with a heat-sealing coating on the paper. We notice that the foil appears to break on the bottom fold. We would like to prevent this from occurring, as it allows the entrance of moisture which causes the product to cake.

ANSWER: There are several possible solutions to the problem of preventing moisture entry through the bottom of the folded foil envelopes packaging your product. Some foils are mounted to paper with adhesives which dry to a hard film. One example of this would be a silicate adhesive, but there are many other types which perform similarly.

It is suggested that you have your supplier submit sample rolls of paper which have been mounted with a flexible type of rubber or resinous adhesive. There are many excellent rubber or resinous emulsions which have been developed for this purpose. The use of such a flexible and strong adhesive will allow the foil lamination to be folded with less danger of breaking the metal.

Another solution would be to have your envelope maker also seal the bottom of the envelope. This would close off moisture migration from the bottom. This seal area could be very narrow, but whether this can be accomplished will depend upon the type of equipment used to manufacture the envelopes.

Another possible answer would be to increase the gauge of the foil so that the metal would be stronger and less likely to cause pinholing when the material is folded.

Here's why Premier uses

CEL-O-SEAL

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"We're convinced that Du Pont CEL-O-SEAL bands offer a golden opportunity for making a quality product look like quality . . . our Roquefort Cheese Dressing package is proving that fact. And the 4 sales messages on our band are extra dividends, giving us a selling package that 'speaks up' in the store."

Says

Theodore F. Whitmarsh,
Director,
Francis H. Leggett & Co.



You, too, should use colorfully printed Du Pont "Cel-O-Seal" bands to dress up your package . . . put your sales message, brand name or slogan where they *must* be seen! And "Cel-O-Seal" is a powerful reminder to the housewife that you've been extra-careful to bring her a protected, quality product.

FREE PACKAGING SERVICE: See what "Cel-O-Seal" does to make *your* package a more effective seller! Send one in, and our packaging experts will band it, return it for your inspection. No charge—no obligation! Address: "Cel-O-Seal" Section, E. I. du Pont de Nemours & Co. (Inc.), 9529-K Nemours Bldg., Wilmington, Delaware. "Cel-O-Seal" cellulose bands are also sold by Armstrong Cork Co., Lancaster, Pa., and I. F. Schnier Co., San Francisco, Calif.

SEPTEMBER 1953

DU PONT CEL-O-SEAL BANDS

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BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

149

Equipment and materials

A NEW TRAY FOR BAKED PRODUCTS

announced by Marathon Corp., Menasha, Wis., is made of foil laminated to white Q-board with a special laminant which withstands intense oven heat enabling cakes, sweet goods, fully baked rolls and a variety of brown-'n-serve items to be baked and sold right in this new Pak-a-Pan tray. Removed from the oven, the trays are overwrapped in plain cellophane,



ready for sale. Brand name and product identification can be printed on the tray's side walls with special heat-resistant inks to withstand baking heat without peeling or smearing. These trays permit the baker to bake and package at the oven level, eliminating the depanning and packaging operation. Other advantages

claimed by the manufacturer are: no greasing, no washing, no long-term pan investment and inventory, less handling, lower unit cost, size flexibility, speedier production. Advantages over plain aluminum foil trays are reported as a more even bake and no sharp edges to cut fingers or puncture overwraps. Pak-a-Pan trays are offered in a wide range of sizes, with tapered or vertical side walls. They may be either tailor made to fit the baker's requirements or purchased in standard sizes. The manufacturer reports that the trays will work on all existing bakery packaging machinery and run smoothly on overwrapping equipment.

A NOVEL TUBE SQUEEZER

introduced by the Dyer Products Co., 514 Second St., N.W., Canton, Ohio, and called "Usital," is made of metal and built into the base clip of a collapsible tube. It is designed to eliminate waste and do away with leaky, messy tubes. Usital is a metal clip with a sliding key. To use it, the key is simply pulled out and turned. According to the maker, there are two ways in which it can be incorporated in the manufacture of tubed products: either slipped



over the already crimped base clip of the tube or installed and crimped when the tube is filled and sealed by a simple crimping machine at rates up to 12,000 per hr. Cost is reported to be so low that a manufacturer of a tubed product would probably not have to raise the price of his product to use the squeezer.

A NEW METHOD OF CELLOPHANE PRE-PACKAGING

at the department-store level, called the "Econo-Tube," has been developed by Milprint, Inc., 4200 N. Holton St., Milwaukee 1, Wis. It differs entirely from previous store-level packaging methods, the company states, in that it does away with the expense of elaborate machinery and made-to-size stock. Economical prefabricated tubing and a simply designed machine are all that is needed. Econo-Tube packaging is printed and prefabricated into tubes, delivered to the department store in rolls. A simple device holds the roll for extrusion and cutting into desired lengths. Closures at the ends of the tubes can be folded, taped or stapled. The tubing comes in seven standard stock widths—6, 7, 8, 9, 10, 11 and 12 in.—which will produce the 32 principal bag sizes used to package merchandise for almost every department in the store—toys,

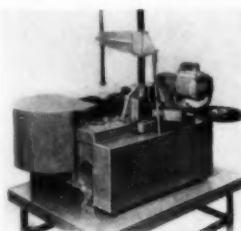
white goods, notions, foods, millinery, socks, gloves, underwear, shirts, costume jewelry, etc. Special sizes can be furnished on order. Continuous designs make it possible to cut the tubing at any place without loss of symmetry. Milprint can produce Econo-Tube packaging by many processes and in any number of colors desired, with store name, brand identity or special informative copy.

A NEW KIND OF RIGID PLASTIC SHEET

material that promises to open up new uses for plastics in the home and industry is being introduced by the Campco Division, Chicago Molded Products Corp., 1020 N. Kolmar Ave., Chicago 51. The sheet is made by forcing a plastic "alloy" made of polystyrene and rubber through a heated die. Since the process is continuous, sheet of any length can be made with widths ranging from 26 to 58 in. and thicknesses ranging from 0.005 to 0.125 in. Color possibilities are unlimited, but transparent is not presently available. The lightweight but strong sheet can be vacuum formed to complex shapes in relatively simple machines at high rates of speed. Packaging possibilities include three-dimensional display pieces which can be printed before forming.

A NEW CAN-SEALING MACHINE

designed for automatic volume sealing of slip-cover cans with pressure-sensitive tape, announced by the E & R Co., Hamburg, N. Y., is reported to offer faster and more economical



sealing. It is adaptable for sealing cans according to military specifications as well as those meeting domestic sealing requirements. The machine automatically starts the tape on the can, wraps it as desired with uniform tension and proper amount of overlap, then cuts it on completion of the seal at speeds better than 900 cans per hr., the company states. A single operator controls the unit. It is designed to handle 2- to 10-in.-diameter cans (one setting allowing a 4-in. diameter variation) and 1 to 12 in. in height (one setting permitting a 3-in. variation if the container can be turned onto its cover during sealing; otherwise the machine must be re-set for each new can height). Built to fit into existing conveyor set-ups, the machine weighs about 450 lbs. and occupies an area 2½ ft. wide by 3 ft. long by 4 ft. high.

A SILICONE LABEL GLUE

announced by Federal Adhesives Corp., 210 Wythe Ave., Brooklyn 11, called Silicone Label Glue A-43, is a dextrine-type glue produced for adhering labels to silicone bottles and vials. It is said to be ideal for use on the Pneumatic, Pony Labelrite and other standard-type labelers.

FOUR COLOR 3D LITHOGRAPHY

has been announced by the Einson-Freeman Co., Inc., Starr & Borden Aves., Long Island City 1, N. Y. It is suggested for window and counter display use, as well as advertising. According to the company, four-color "Compatible 3D" pictures viewed without glasses are seen as normal, two dimension

packaging news...



by **HARCORD**



"A steady increase in sales", reports Yardley about its brown and buff paper package of Lavendomeal bath salts. We at Harcord like to feel that personal attention is responsible for our six years of service to Yardley.



The trade has already called Revlon's Fire and Ice promotion the most sensational in cosmetic history. This fine product made its bow in a provocative black and red paper canister. We take pride in producing the competitively priced packaging behind this amazing success story.



Attention-getting packaging is often the result of minute attention to details. Nestle-LeMur, another user of Harcord paper canisters, constantly gains wider distribution for its Blue Waltz Dusting Powder with its smartly designed package.



Since the introduction of the Du Barry Cologne Duo by Richard Hudnut more and more women have enjoyed receiving this delightful gift. We think that's a fine testimonial to a good product—well packaged by Harcord.

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FILL ANY SIZE — ANY TYPE PACKAGES

**Faster — More Accurately
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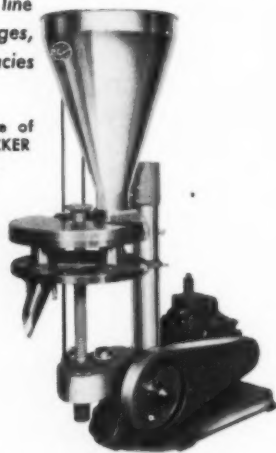
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Fill any size, any type packages,
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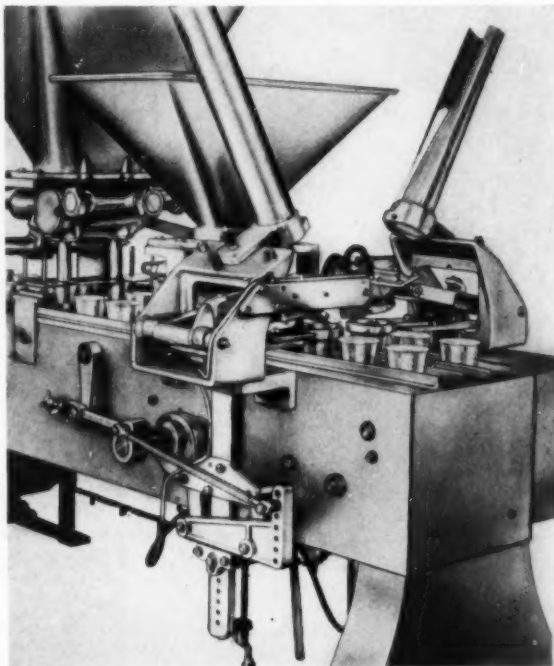
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CANADIAN: HUNTER-SMITH COMPANY, TORONTO, CANADA (EXPORT) THE ESTES COMPANY, INC., NEW YORK, N. Y.

Equipment and materials

pictures. A two-color 3D picture viewed without glasses is seen as a blurred mass, while, of course, with glasses both two-color and four-color have form, substance and third dimension.

A NEW ALL-PURPOSE VACUUM CAPPER

for cottage-cheese and ice-cream cup filling (see "Salad by Machine," p. 108) introduced by the Triangle Package Machinery Co., 6633 W. Diversey Ave., Chicago 35, is reported to handle all types of cups and lids normally used for cottage




cheese, sour cream, salad and ice-cream filling. Thus one vacuum capper replaces previous methods of using several capping heads for different capping operations. This new Triangle-Bagby vacuum capper is said to permit complete change-over from any style or size lid to another very rapidly and at low cost. It is now standard equipment on all automatic Triangle-Bagby fillers.

A NEW VACUUM PLATING PROCESS

for glass or plastic closures or containers has been reported by the Richford Corp., 251 Fourth Ave., New York, to duplicate gold or silver finishes at a fraction of the cost of metal closures or containers. Exhaustive tests have been performed on these new finishes, the company says, during which they were subjected to acid, alkali, immersion, abrasion and fading. A number of stock caps in gold and silver finish are currently available. Additional styles and complete packages, including the Spillproof line of perfume flacons, will be available shortly.

A RESYN PRECOATING MATERIAL

announced by National Adhesives, Div. National Starch Products, Inc., 270 Madison Ave., New York 16, is said to seal and smooth the surface of rough and gray chipboard to produce at a low cost a superior printing surface on board comparable to clay-coated stock. The improved printing surface



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Figure the price, too, of packaging in Kodapak Sheet . . . in terms of a material that's easy and economical to use—uniform, free from bubbles and surface defects.

For further information, including technical data and names of specializing firms, consult our nearest representative or write:

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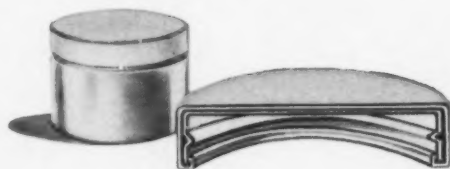
Sales offices: *New York, Chicago, Dallas.* Sales representatives: *Cleveland, Philadelphia, Providence.*
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Merit SEAL



● Merit SEAL outsells all competition. The demand is greater because the "closure" is better.

See for yourself how really attractive and efficient Merit Seal is!

NOW AVAILABLE IN THE FOLLOWING NEW SIZES:
38, 40 and 45 mm. Other Sizes—48, 51, 53, 58, 60, 63, 66, 70, 75, 83, 89 and 100 mm.

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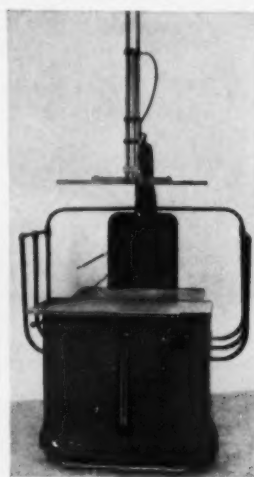
DIVISION OF

**Crown Cork and Seal Co.
St. Louis 15, Missouri**

Equipment and materials

obtained with this Resyn 80N782 makes possible a glossier, more attractive job with better printing definition while using less ink, according to National. The adhesive can be applied in a thin film and dries to a moisture-resistant coating that does not smudge readily under damp conditions.

NEW, HEAVY-DUTY TYING MACHINE



being introduced by the Ludlow Mfg. & Sales Co., Boston, Mass., utilizes a method of sealing twine ends with metal rather than a knot. Using single, double or triple twine wraps, it ties packages automatically and simultaneously seals the two ends of twine with a smooth, compact, metal clip. Twine, especially made for this machine, is put up on knotless 12-lb. cones, each of which is flagged to signal the operator when a new one is needed. Thus, by eliminating retreading, precious minutes are saved. From beginning to end, the operation is said to take less than three seconds. The machine is reported to reduce twine costs.

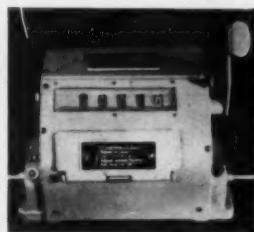
A NEW AIR EXTRACTOR

that is said to permit the use of polyethylene poultry and meat wraps at lower cost has been announced by the Cargo Packers Special Products Co., 73 Rutledge St., Brooklyn 11, N. Y. This new machine collapses the bag and permits quick, easy, economical and efficient sealing by the packer, the manufacturer reports. No skill is required to operate the machine, which is handled by one man. Features of the unit include finger-tip control by means of the nozzle-mounted switch. The operator has positive exhaust control, which is said to eliminate bag fractures. The machine is mounted on casters for portability.



NEW PREDETERMINING COUNTERS

manufactured by the German firm of Irion & Vosseler Co. are available in the United States from the company's local representative, The Presin Co., 5225 Wilshire Blvd., Los Angeles 36. Known as the 280 Series, these new predetermining counters are set instantly by grip wheels located under a hinged cover and feature a lever reset. They are available for stroke, revolution, measuring and impulse counting, operating to 6,000 r.p.m. in revolution types, either adding in both directions or adding and subtracting. Release is effected in one or two stages by mechanical lever or by means of a dipole switch.



An eight-digit totalizer (reset and non-reset) is optional with

MODERN PACKAGING



Gleaming, lustrous Opticlear Vials keep contents fresh and clean.

Pack in beauty - pack in KIMBLE OPTICLEAR VIALS

Show off the superiority of your product, and give it safe protection in handsome Kimble Opticlear Vials.

These trim, sparkling containers keep contents fresh, dry and clean ... free from dust, dirt and moisture.

Inside a Kimble Opticlear Vial your product can be safely stored in refrigerators or bathroom medicine cabinets. New, resilient, plastic stoppers keep contents dry with a positive moisture-proof seal.

Distinctive Opticlear Vials improve the salability of every dry product packaged in them. See how attractive your product will look, too. Write now, and we'll send you free samples of the sizes you use.



KIMBLE GLASS COMPANY

Toledo 1, Ohio—Subsidiary of Owens-Illinois Glass Company



How to package a percolator in two easy lessons!

The Enterprise Aluminum Company makes these gleaming electric percolators. Problem was to keep the percolators bright and shiny until they reached the customer. Enterprise learned this first: ordinary kraft paper wouldn't do. Too many scratches that resulted in too many returns. Then they learned this: *two* sheets of Crystal Tissue cut returns *way* down. Soft, strong *inner* tissue sheet reduced scratching and "break-through". Tough *outer* sheet prevented "burning" against carton walls. Result? Fewer returns. Whatever your product, there's a lesson here for you. Crystal Tissues could be the answer to *your* packaging problems. Call your Crystal distributor or write Dept. M for his name and address.

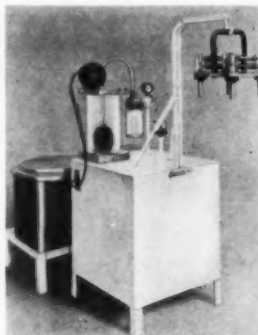


THE CRYSTAL TISSUE COMPANY, Middletown, Ohio

Equipment and materials

the unit, which is offered for base mounting, as illustrated, and for panel mounting, with a choice of shaft extensions. The 280 Series is one of several new counters recently designed by IVO, one of Europe's largest manufacturers of such devices, for application to specific groups of machinery.

A NEW FILLING MACHINE



for filling bottles that have been previously labeled and packed into shipping cases has been announced by the Eyrle Co., 1539 Folsom, San Francisco 3. Operating with the head of the filler lowered into the case, the filler fills the bottles by vacuum and is designed to return surplus liquid to an overflow container. The motor automatically stops when the bottles are filled. The new filler, which eliminates handling of heavy, filled bottles, is said to be ideal for all types

of free-flowing liquids. The manufacturer states that the machine is easily cleaned. The filler is available either with or without a supply tank.

A NEW SMALL-SIZED HAM CAN

introduced by the American Can Co., 100 Park Ave., New York, accommodates hams in the 3-to-4½-lb. category. This new pear-shaped, double-seamed, sanitary-style, key-opening can, said to be the smallest ham can made in the United States, is designated the No. 1 size and augments the No. 2 (4½-to-7-lb. size) and the No. 5 (12-to-14-lb. institutional size) ham cans previously available.

A NEW BUILT-IN HANDLE PACKAGE



called the heavy-duty "Take-Hold" bag suitable for packaging of bulk goods, has been introduced by the Equitable Paper Bag Co., Inc., 45-50 Van Dam St., Long Island City 1, N. Y.

It is recommended for promoting multiple-unit sales, variety assortments, combination deals, 5-, 10- and 15-lb. economy-sized offerings and many other sales-stimulating uses.

The sturdy bag, with its reinforced built-in handle, is available in solid face and with cellophane or mesh windows. The bags, of course, may be printed to the user's requirements.

A NEW-TYPE AEROSOL VALVE

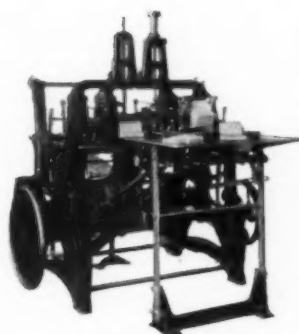
that dispenses pressurized products when the head is pressed in any direction is now being marketed by the Aerosol Research Co., 743 Circle Ave., Forest Park, Ill. Called the K-38, this versatile valve was developed as a result of consumer surveys that pointed up the need for a unit that would operate with a minimum amount of finger pressure. This new valve operates at the slightest touch—when the valve head is moved either forward or backward, left or right. A metering orifice that does

MODERN PACKAGING

AGAIN
the choice is **US**



Necco's carton for chocolate mints is made on **STANDARD BRIGHTWOODS**



the **STANDARD BRIGHTWOOD**
Forms hinged-cover, telescope, trays, and tapered boxes in a wide variety of sizes at speeds up to 60 or more finished boxes per minute. High Speed Models also available.

Manufacturers who produce their own boxes and cartons, as well as commercial box makers are sold on U. S. Automatic carton-forming machinery because they can rapidly turn out precisely-formed, solidly-glued boxes. The New England Confectionery Company, manufacturers of famous Necco candies, use Standard Brightwood machines to make the chocolate mint cartons illustrated. Should a new design be developed or a different size be required, these Standard Brightwoods may be changed over easily and quickly to handle other sizes of cartons.

And it is this speed and versatility that appeals to the commercial producer who is called on continually to turn out varying sized cartons in large quantities and often on short notice. Whether you produce boxes for your own use or for others, it will pay you to learn the advantages you can enjoy when you use packaging machinery made by **US**. Write **US** today, giving complete details of your problem.

U. S. AUTOMATIC BOX MACHINERY CO., INC.

Owning and Operating NATIONAL PACKAGING MACHINERY CO. * CARTONING MACHINERY CORP.

122 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: New York * Cleveland * Chicago

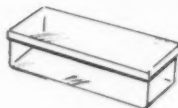


Net and Gross Weighing
Package Forming and Filling
Carton Sealing, Lining,
Wrapping, Box Making

Package your products in BRADLEY Rigid Plastic Boxes



No. 30
2 1/8" x 1 1/4" x 3/8"
(with slide cover)



No. 33
3-7/8" x 1 1/2" x 1"



No. 9
2 1/2" x 2 1/2" x 7/8"



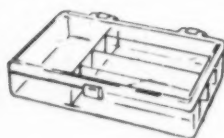
No. 34
4-7/8" x 1-7/8" x 1"



No. 1350
5 1/2" x 2 1/4" x 1 1/2"



No. 369 H
2 1/8" x 1 5/8" x 1/2"



No. 314A
5-3/16" x 3-3/16" x 1-1/8"
(6 compartments hinged)

No. 314B
Same as 314A
(different compartment
arrangement)

No. 314C
5 3/16" x 3 3/16" x 1 1/8"
(no compartments)

Many alert merchandisers are packaging their products in one of our over 500 rigid Polystyrene boxes . . . hinged, not hinged, with tight-fitting covers, with sliding covers, with and without compartments, etc.

From stock molds or we will design a box to your specifications. Send for our latest completely illustrated catalog . . . visit our new factory and showrooms when in Chicago.

"World's largest assortment of
rigid plastic boxes"



BRADLEY
INDUSTRIES

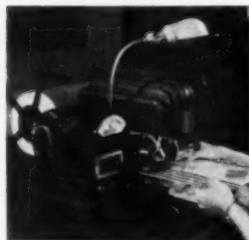
1650-58 North Damen Ave. Chicago 47, Ill.

Equipment and materials

not come in contact with any other part of the valve is said to prevent clogging. The K-35 can be pressure or cold filled and, according to the manufacturer, will allow faster pressure filling than other valves.

PRICE MARKING OF PRE-PACKAGED HOSIERY

with heat-sealed labels is reported to be accomplished at speeds up to 120 per minute, depending upon the skill of the operator, by the new Thermaply machine introduced by the Soabar Co., Philadelphia.



This new semi-automatic method for price marking cellophane packages is considerably faster and more efficient than the hand-labeling methods previously used, the company states, since the machine combines printing and attaching of labels in one operation. Originally designed

for marking textiles, the machine was adapted for use on cellophane surfaces.

PROTECTIVE BAGS FOR BAKERY PRODUCTS

known as "inner crisper" bags that are said to keep crackers crisp and fresh for an extensive period are now being produced by the Union Plastic Films Co., a division of Transparent Package Co., Chicago. The bags are now being used by Salerno-Megowen Biscuit Co., Chicago, and by Megowen Educator Food Co., Lowell, Mass., in packaging graham crackers and saltines.

Under terms of an agreement consummated with George F. Salerno, inventor of the product, Union Plastic Films has exclusive world-wide rights to produce these bags and offer them to the trade with a license to complete the food package. The bag, made of Dow Chemical Co.'s saran, or other moisture-proof films, is permanently sealed at one end and unsealed but folded over at its opposite end and is said to control the moisture content of the cracker displayed on the store shelf to the normal rate of 3%.

With the bag, the consumer can remove part of contents, fold back the top of the bag and store the remainder of the crackers, which will retain their original crispness, for future use. Breakage is also reported reduced because of the special construction of the bag.

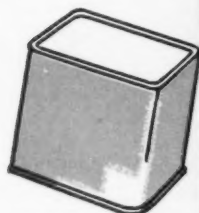
A NEW VALVE FOR SPRAY-PACK PAINTS

equipped with a cleaning rod is reported to clean itself automatically each time the valve is either opened or closed, thus eliminating clogging under all conditions, according to the manufacturer, Seymour of Sycamore, Inc., Sycamore, Ill. The cleaning mechanism can be compared to the operation of cleaning out a small tube that has become clogged, the simplest way being to force a wire through the tube. This is the principle used in the new Purton Clean-O-Matic valve. The cleaning rod in the valve is activated each time the atomizer spray head is pressed down. It breaks any seal formed in the syphon tube and is said to permit a free flow of paint at all times.

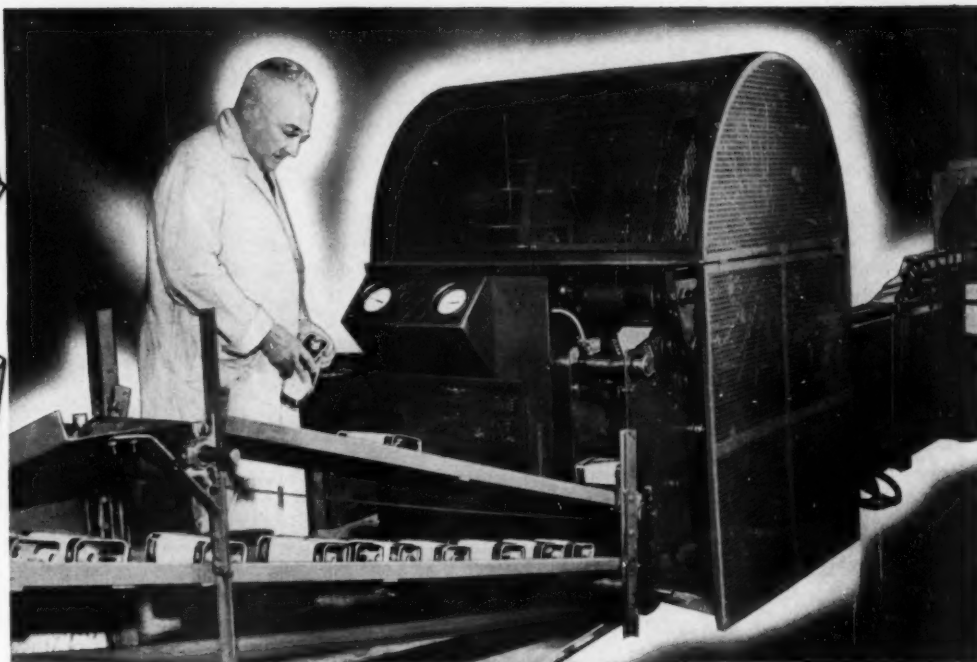




TESTS ROUND CANS
FROM 2" to 4½" dia.



TESTS SQUARE AND
RECTANGULAR CANS
FROM 2¾" to 4¼"
ACROSS CORNERS
(can be modified for
larger sizes)



The BLISS 318-- Here's a practical can tester for medium speed production lines

The 18 testing heads of the Bliss 318 handle F-style cans in half-pint, pint and quart sizes at up to a 150-per-minute rate . . . square and rectangular cans up to 100 per minute, including those with handles and spouts.

SIMPLE, FOOLPROOF TEST—As cans feed into the Bliss 318, they're enclosed by one of the 18 air-tight testing buckets. Compressed air is then pumped to the can. Even the slightest pinhole leak in the can will cause air pressure in the bucket to rise. When that happens the can is ejected automatically. It's a simple, thoroughly-dependable way to eliminate "leakers".

COMPLETELY AUTOMATIC—The Bliss 318 Automatic Air Can Tester needs no operator. An electrically-controlled stop-and-start feeding system completely eliminates jams—*automatically*. All cans are tested and

passed or rejected—*automatically*. And the simple, rugged construction of the 318 means trouble-free performance, a minimum of maintenance.

COMPACT—Easy to install in your production line, the Bliss 318 only requires a floor space of approximately 5 x 6 feet.

MODERATELY PRICED—The Bliss 318 Can Tester gives you the advantages of many larger testers—at a lower cost! Can you use a Bliss 318 on your line? It's easy to find out. Call in a Bliss Can Machinery Specialist to study your production line set-up and make his recommendations. There's no obligation on your part, of course.

E. W. BLISS COMPANY
50 Church Street, New York 7



BLISS

on your machine is more than a name... it's a guarantee

BLISS CAN AND CONTAINER MAKING MACHINERY



SLITTERS



BODYMAKERS



FLANGERS



SEAMERS



TESTERS



STRIP FEED PRESS

Plants and people

Continental Can Co., Inc., New York, in a step to round out its diversification in the packaging field, has purchased all the outstanding stock of the **Elmer E. Mills Corp.**, Chicago, it is announced by **Gen. Lucius D. Clay**, chairman of the board of Continental. The Mills company, producer of plastic products, including polyethylene flexible bottles, tubes and pipe and tubing, has one plant in Chicago which will continue to operate under the supervision and direction of Mr. Mills.

Benjamin C. Betner Co. and Shellmar Products Corp., recent acquisitions of Continental Can, have been consolidated into the company's new Shellmar Betner Flexible Packaging Div. **Benjamin C. Betner, Jr.**, will be in charge of operations for the new division, with headquarters in Mt. Vernon, Ohio. Shellmar Betner Flexible Packaging Div. plants are located in Mt. Vernon and Zanesville, Ohio; Appleton, Wis.; Devon, Pa.; Richmond, Va.; Columbus, Ga.; Beaumont and Paris, Tex., and Los Angeles and South Gate, Calif. There are also five former Shellmar plants in Latin America and affiliates in other foreign countries.

Continental has appointed **F. Guild Devere** as products sales manager for Decoware. **Robert I. Dietrich** has been appointed assistant to the sales manager of general line cans in the company's central metal division.

A 250-in.-trim Fourdrinier paperboard machine has been installed and is now in operation at Continental's pulp and paperboard facility at Hopewell, Va. Its introduction is said to be a step forward in paperboard machine design and operation, since the trim of the machine is approximately 2 ft. wider than any previous paperboard machine. The machine was installed to supply drum liner board to meet increased demands for fibre drums. Additional improvements in 1953 and 1954 will increase the capacity of Continental's pulp mill to approximately 600 tons a day, the company reports.

Jack S. Lee has been named district sales manager of Continental's paper container sales office in Cleveland and **Frederick O. Horne** has been appointed Southwest district sales manager for paper containers at Dallas.

Irvington Varnish & Insulator Co., Irvington, N. J., has been purchased by **Minnesota Mining & Mfg. Co.**, St. Paul, Minn. Irvington Varnish, maker of insulating varnishes, varnished cloths and papers, extruded plastic insulations and bottle-cap liners, will become a division of 3M. **Arthur E. Jones**, president of Irvington Varnish, will continue as president of the

new division. **Robert L. Westbee**, general manager of 3M's electrical insulating and sound-recording-tape division, will be responsible for liaison between the parent company and the new division.

Milprint, Inc., Milwaukee, Wis., printing and packaging firm, has added two more countries to its list of foreign affiliates—Belgium and England. Already affiliated with Milprint as licensees are companies in Canada, Cuba, Venezuela, Italy, Japan and Germany.

The Chase Bag Co., Chicago, has appointed **J. A. Brewster**, manager of the Portland branch, as sales director for the Western region, which will represent the



J. A.
Brewster
(left) and
J. H.
Counce

territories and sales offices now responsible to the Portland and Los Angeles branches. **J. H. Counce**, manager of the New Orleans branch, is now sales director of the Southern region, which will represent the territories and sales offices now responsible to the Dallas, New Orleans and Orlando branches. **J. P. Grady**, manager of the Philadelphia



J. P. Grady



H. B. Rue

branch, is sales director for the Eastern region, representing the territories and sales offices now responsible to Buffalo, New York, Philadelphia and Richmond branches. Each new regional sales director will also continue in his present capacity as branch manager.

Harrison B. Rue has been promoted to manager of the company's Buffalo branch.

William E. Braithwaite has retired from the Commodity Standards Div. of the U. S. Dept. of Commerce after more than 44 years of Government service. At the time of his retirement, Mr. Braithwaite was chief of the Packaging and Hospital Equipment Section. Mr. Braithwaite has specialized in the application of simplified practice and commercial standards in the fields of containers,

packaging, materials handling and miscellaneous products. His recommendations have been utilized by producers, distributors and users throughout the nation. In addition to his work in the project field, Mr. Braithwaite has served on many committees, among which were the Federal Specifications Board Committees on packaging and hospital supplies and the Interdepartmental Committees on materials handling, packaging and shipping for defense. Mr. Braithwaite has been a contributor to both **MODERN PACKAGING** and **Modern Packaging Encyclopedia**.

I. F. Schnier Co., Inc., San Francisco, and **Armstrong Cork Co.**, Lancaster, Pa., have terminated their exclusive arrangement under which Schnier distributed Armstrong's line of corks, metal caps and molded caps. The arrangement covered California, Oregon, Washington, Idaho, Utah, Nevada and Arizona.

R. H. Mulford, vice president of **Owens-Illinois Glass Co.**, Toledo, has been elected vice president and general manager of **Kimble Glass Co.**, a subsidiary. Mr. Mulford succeeds **S. J. McGivern**. In his new capacity, Mr. Mulford will be responsible for the production and sale of all Kimble Glass Products.

Merrill O. Maughan has joined the **Folding Paper Box Assn. of America** to take over operation of the Bakery Package Group.

John C. Clay has completed his duties with the NPA and is returning to private industry. He will continue, however, to serve as consultant to **H. B. McCoy**, acting NPA administrator. Mr. Clay has been on leave from **National Starch Products, Inc.**, New York.

Triangle Paper & Box Co., Chicago, has appointed **Lawrence I. Falls** as vice president in charge of sales. Mr. Falls will direct the sales of the corrugated container and packaging materials divisions.

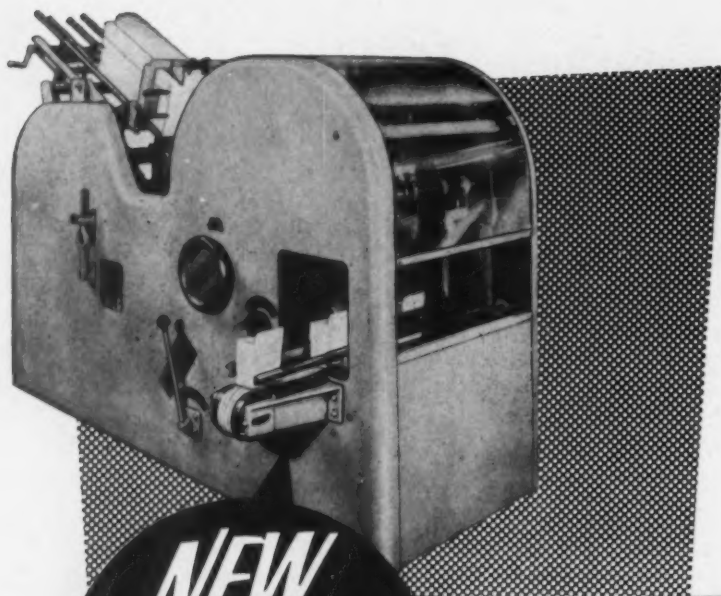
Ivers-Lee Co., Newark, N. J., has purchased a third plant at 320-332 Orange St., Newark. The acquisition of the new plant will make it possible for Ivers-Lee to segregate its various types of packaging services, allowing each of the three plants to concentrate on a particular packaging function.

Gaylord Container Corp., St. Louis, Mo., manufacturer of shipping containers, folding cartons, bags and kraft wrapping papers, has promoted **M. M. Jamieson**

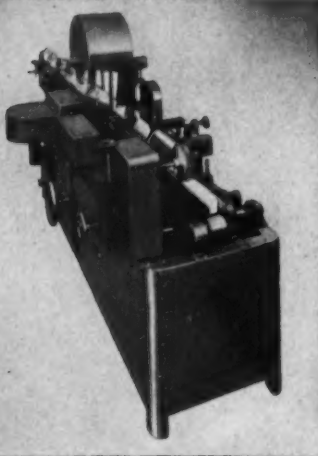
HINDE & DAUCH

*for over 50 years has been giving **YOU**
handsome and dependable
corrugated boxes*





NEW
cost-cutting
combination



**New Model SE Peters Carton
Forming and Lining Machine
Teams up with Model CCY
Folding and Closing Machine**

Now . . . with TWO new Peters machines . . . you can form, line, fold and close hinged, open-top cartons at speeds up to 120 or more per minute.

These two fully automatic machines do the work of three. Labor and packaging costs are reduced.

The brand new ultra modern Model SE Peters Carton Forming & Lining Machine features *on-the-job adjustability* to handle different carton sizes. Easy loading features and knee-high conveying contribute to ease of operation. Peters Machines are ruggedly built for years and years of trouble-free operation.

Write for complete information. It will help to send samples of your cartons.



MACHINERY COMPANY

4712 Ravenswood Avenue
Chicago 40, Illinois

In business since 1899 to help you package your products better

Plants and people

to head the corporation's newly created General Sales Service Div., with headquarters in St. Louis. Frank R. Boswell succeeds Mr. Jamieson as manager of the Memphis office. B. C. Vogt has been promoted to manager of the Detroit office. Mr. Vogt succeeds James A. Talboys, promoted to plant manager at Jersey City, N. J.

The Plastics Div. of Celanese Corp., New York, has acquired larger, more modern Pacific Coast headquarters at 3460 Wilshire Blvd., Los Angeles 5. R. J. Hough is Pacific Coast district sales manager. San Francisco headquarters will remain at 607 Market St.

The Battle Creek Bread Wrapping Machine Co., Battle Creek, Mich., has appointed Morean & Risch, Inc., Milwaukee, Wis., as exclusive representatives for Battle Creek bakery equipment in Wisconsin, Upper Michigan, Minnesota, Iowa, Indiana and Northern Illinois.

National Can Corp., New York, has purchased the complete can-manufacturing facilities of the Standard Oil Co. of Ohio, Cleveland, which comprises can-manufacturing and lithographing equipment. The equipment will be used in National's new Cleveland plant to supply can requirements of Standard Oil and its customers. Transfer of the equipment will take several months, during which time Standard Oil will continue to operate these facilities.

Herbert M. Kenter has joined the Transparent Wrap Machine Corp., Hasbrouck Heights, N. J., in the engineering-sales department. Mr. Kenter will represent Transwrap in the East Coast states from the New York metropolitan area to eastern Virginia.

Formation of a new chemical division sales office in Portland, Ore., has been announced by The Goodyear Tire & Rubber Co., Akron, Ohio. Roy Williams will head the new sales outlet in the Pacific Northwest, including Washington, Montana, Idaho and Oregon.

John B. Kohler, former president and chief engineer of The Kohler System Co., has opened offices at 218 Woodstock St., Crystal Lake, Ill., as a consultant to the paper, paper converting and printing industries. Kohler System equipment is manufactured in Canada by the Port Arthur Shipbuilding Co., Ltd., Port

MODERN PACKAGING



Containers that KEEP the BEST ...in YOUR BEST

Sturdy steel drums and pails—made with care and accuracy in every detail—provide dependable protection for the best sales assets of your products. They make certain that the qualities that have been sold to your customers remain safely sealed.

That's why J&L Steel Drums and Pails are standard packaging specifications for many leading product brands. They have proved through years of dependable service that they meet the most rigid tests for durability.

Plants for the manufacture of J&L Steel Drums and Pails are located in leading industrial centers to assure quick, efficient service to meet your requirements. Call the nearest J&L office . . . or, contact our headquarters office in New York City.

JONES & LAUGHLIN STEEL CORPORATION *Container Division*

CHRYSLER BUILDING • NEW YORK 17, N. Y.

PLANTS: Bayonne, N.J. . . . Cleveland, Ohio . . . Philadelphia, Pa. . . . New Orleans, La.
. . . Kansas City, Kan. . . . Atlanta, Ga. . . . West Port Arthur, Texas . . . Toledo, Ohio

**J&L
STEEL**

For full line catalog and details of J&L Steel Drum and Pail products, request literature and we will mail it to you immediately.

• Heavy-duty J&L Drums • Light-weight Drums • 55, 30 and 15 gal. capacity and 100-lb. Grease Drums • Intermediate Drums for Chemical and Petroleum Materials • 1-20 gal. capacity Steel Pails for Specialty Chem-



**"For hard working packages
I specify Niemand Bros. Tubes"**

Smart Purchasing Agent! For commercial, industrial, and electronic packaging, Niemand Bros. tubes give superior protection, allow plenty of usable display surface, come in a wide range of sizes, offer many convenient closure styles, and are adaptable for all sorts of merchandise.

Where metal is now being used, we can, if necessary, substitute paper or fiber with no appreciable loss of efficiency.

What more could you ask of any container at any price? Design suggestions submitted on request.



Plants and people

Arthur, Ontario, and represented by F. E. Palmer & Co., Montreal. Sales and engineering of Kohler equipment will be handled by Mr. Kohler from Crystal Lake.

Perl Machine Mfg. Co., Brooklyn, has appointed Cannery Machinery, Ltd., Simcoe, Ontario, as the company's exclusive agents for all Canada. All machines sold in Canada will be serviced by Cannery Machinery, Ltd.

The Celluplastic Corp., Newark, N. J., manufacturer of cylindrical plastic containers, has appointed John A. Kilmartin as product manager of the Plastic Squat Jar Div. Mr. Kilmartin was formerly with Container Corp. Augustus T. De Vera, Jr., has been appointed to Celluplastic's sales staff.



J. A. Kilmartin

Machine O'Matic, Inc., Chicago, has announced a re-organization and expansion of facilities with A. I. Bessony as president. The company makes electronic registration controls and is now offering the packaging and graphic arts trade a completely new combination of correction and variable speed transmission combined as a single unit, said to give an accuracy of registration control to much closer tolerances than have been possible in the past.

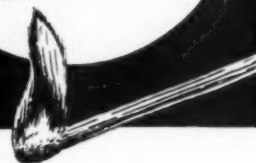
Krafco Container Corp., Dallas, Tex., has started construction work on an expansion plan at the company's West Monroe, La., plant, which is devoted exclusively to the manufacture of corrugated boxes.

Fletcher L. Munger has been appointed Western sales manager in charge of the Chicago office of the Gilman Paper Co., New York. He succeeds E. A. Kendler, who has retired.

The Paper Chemicals Dept. of American Cyanamid Co., New York, has appointed F. A. Strovink as assistant manager of the department's Eastern region. J. C. Barthel has been appointed as assistant technical director. Mr. Strovink will operate from Boston, while Mr. Barthel will remain in New York.

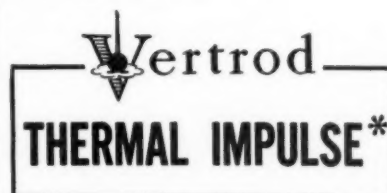
John O. Hubler has been appointed sales promotion manager of The Specialty Papers Co., Dayton, Ohio. He will direct all the company's promotion, advertising

THERMAL IMPULSE SEALING CAN'T BURN POLYETHYLENE



Vertrod Thermal Impulse

- ... never reaches a temperature that will burn the material
- ... seals are unaffected by variations in material thickness, humidity, or length of dwell



EXACT UNIFORMITY TEAR RESISTANT

SEALS POLYETHYLENE, PLIOFILM AND OTHER FILMS RIGHT THROUGH LIQUIDS AND POWDERS

- Electronically controlled seals
- Extreme versatility. All non-metallic barrier materials to .006"
- Seals are cooled under pressure. Cold heater bars
- Simple dial control of time cycle
- No skill required, no warm-up needed. Always ready to seal
- Seals plain and gusseted bags and wrinkled material
- Models 9" to 42". Extremely low priced
- Machines developed to meet your requirements for sealing and fabricating special shapes

See For Yourself

Write for specimen polyethylene seals made by Vertrod or send samples of your own material.

* Patented process manufactured under one or more of the following patents: 2,460,460; 2,509,439; 2,574,094; 2,574,095



17 Williams Avenue Brooklyn 7, N. Y.
WEST COAST PLASTIC DISTRIBUTORS
4113 W. Jefferson Blvd. Los Angeles, Calif.

and market research activities. Specialty Papers Co. has recently added printed and laminated foils and films to its regular line of waxed papers and is completing an addition to its Dayton plant to provide more space for this activity.

American Can Co., New York, has appointed **F. Joujon-Roche** to the newly created post of manager of manufacture of the company's closing-machine department. Mr. Joujon-Roche, who was formerly manager of the Pacific Div.'s closing-machine department, will be succeeded by **W. D. Grimmer**, former assistant manager of the Pacific Div.

As part of a program to give executives experience in all phases of activity, American Can has appointed **Louis G. Germain**, supervisor of the fruit and vegetable group at Maywood, as supervisor of the company's Northwest district laboratory in Seattle, Wash. **Norman J. Willett**, supervisor of the Seattle laboratory since 1945, has moved to Maywood to assume Mr. Germain's duties.

American Can is installing a new fibre milk-container manufacturing unit at its Stockton, Calif., plant. The Stockton unit, together with the milk-container-making plant under construction at Needham, Mass., are expected to begin operations next year.

A testimonial plaque from top-ranking leaders in Great Britain's canning industry has been presented to **Hal Johnston** for his work in developing good will with British users of canned goods. Mr. Johnston is president of the Canning Machinery & Supplies Assn. and retired vice president of **Stecher-Traung Lithograph Corp.**

The Bakery Div. of **American Machine & Foundry Co.**, New York, has established a factory sales and service office in the AMF Chicago branch office to handle the complete line of AMF and AMF-Union bakery machinery and ovens. Sales engineers headquartered in the Chicago office are **F. E. Youngdahl** and **H. M. Rittmeyer**. **William C. Shissler** and **James O'Dea** have been named Midwestern sales representatives of the Bakery Div. and will headquarter at Chicago. Mr. Shissler's territory will include North Dakota, South Dakota, Minnesota, Iowa and Wisconsin. Mr. O'Dea will cover Colorado, Nebraska, Kansas, Missouri and the lower half of Illinois.

Fred N. Symes has been appointed Western Canadian sales representative of AMF's Bakery Div., with headquarters in Vancouver, British Columbia.

Robert Gair Co., Inc., New York, manufacturer of folding cartons, paperboard and shipping containers, has appointed **Dr. Keith Max** as assistant in charge of paperboard production of its folding carton division, with headquarters in New



A 'slick' performer on a wide range of sizes

The Battle Creek Model 47 Wrapping Machine easily overwraps a diversified range of package types and sizes, requiring only from 8 to 10 minutes for a complete change from one size to another. Thus one machine can be made to do the job of several ordinary machines, often handling an entire line of products with a minimum original investment and at a considerable saving in floor space.

The smooth performance of the Battle Creek "Continuous Flow" principle of operation, permits sustained high speeds up to 80 or more neat and attractive packages per minute.

Whether it is overwrapping cartons of cookies or crackers, cookies in trays, or packages of cereals or a host of other types you may produce, your packaging problems can be solved through the superior, trouble-free operation of the Battle Creek Model 47 Wrapping Machine. Write for general bulletin on the complete Battle Creek Line of wrapping and packaging machines.

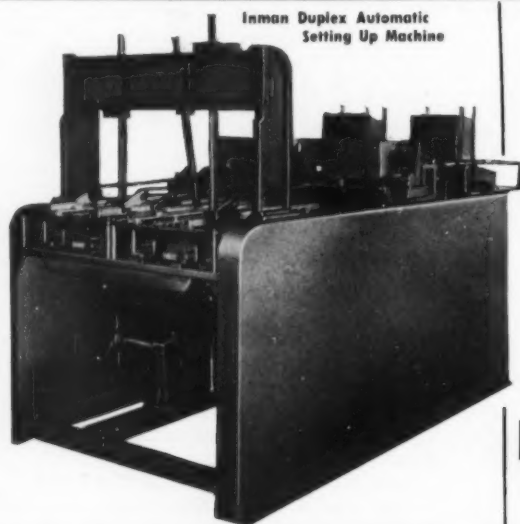
Continuous Flow
PACKAGING

**BATTLE CREEK
BREAD WRAPPING MACHINE COMPANY
BATTLE CREEK, MICHIGAN**



Set up boxes faster than ever

Up to 150 per minute



Inman Duplex Automatic
Setting Up Machine

SPECIFICATIONS

Depth	3/4" to 4 1/2"
Maximum Length	12"
Maximum Width	12"
Largest Blank	16" x 17"
Machine Speed	Up to 75 per minute
Production	Up to 150 pieces per minute
Floor Space	51" wide x 110" long
Weight	5200 pounds
Horsepower	2

Inexpensive tools for extra sizes available. Equipped with rotary gluers and completely adjustable forming well. One operator. If sizes beyond those specified are required, they can be accommodated by changes in design. *Price and delivery on request.*

Inman Manufacturing Company, Inc.

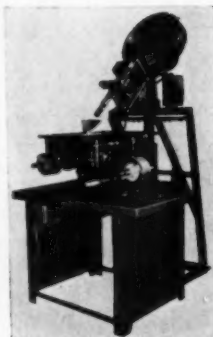
Amsterdam, New York

ENVELOPES • BAGS



GENERAL LITHOGRAPHING & PRINTING CO.
OFFSET PRINTING • ENVELOPES • BAGS • CELLOPHANE PRINTING
402 KISHWAUKEE ST. • ROCKFORD, ILLINOIS

LOOK WHAT THE AUTO-PAK IS DOING NOW!



Auto-Pak with attachment

Over 60 filled packages per minute can now be delivered through the latest attachment to the Auto-Pak. It feeds hardware, electrical and similar products to the packaging machine which automatically forms two sheets of heat sealing material around the items, seals the four sides, cuts off and delivers a completely sealed, attractive package, one every second.

The Auto-Pak is versatile, efficient, economical. It's your best bet if you want to package your product for protection, for appearance, for ease in handling.

Write for folder and your free copy of "Unit Packaged For The Assembly Line"—a booklet describing the job the Auto-Pak does for a leading auto manufacturer.

PAK-RAPID INC.

530 N. 21st. Street, Philadelphia 30, Pa. LOcust 7-4240

New York Representative

I. J. White Company, 70 W. Houston Street, AL 4-0180

Plants and people

York. Dr. Max had been assistant technical director of Gair's research department. **William H. Caddoo**, formerly at the Gair Thames River plant, has been appointed assistant to **Herman Whitmore**, vice president in charge of box-board operations. **A. J. Brewster**, general sales manager of the container division, now has charge of operations at Gair's Teterboro Corrugated Box Div. as acting division manager. He is replacing **Floyd C. Costello**, on a leave of absence.

A. V. Phillips and **H. H. Allen**, directors of **Bemis Bro. Bag Co.**, St. Louis, Mo., have announced their retirement and resignation from the board. Mr. Phillips joined Bemis in 1891 and has been a director since 1911. He was a vice president from 1912 to 1946. Mr. Allen joined the company in 1889 and has been on the board since 1912. To fill their un-



*T. W.
Little
(left) and
R. M.
Hersey*

expired terms **T. W. Little** and **R. M. Hersey** have been elected to the board. Mr. Little started with Bemis in 1916 and has been treasurer since 1946. During World War II he was a member of the OPA and WPB Industry Advisory Committees. Mr. Hersey has been with Bemis since 1914 and has been serving as assistant director of sales for inter-divisional accounts since 1951.

W. F. Mulvaney has been appointed supervisor of multiwall paper bag sales for Bemis. Mr. Mulvaney succeeds **C. W. Akin**, who has been made assistant director of sales for Bemis. **R. L. Baker, Jr.**, succeeds Mr. Mulvaney as sales manager of Bemis' bag plant at Peoria. **K. W. Koechig**, former assistant to Mr. Akin, has been made supervisor of small paper bags sales.

Bemis reports that its new plant at 1975 S. Latham, Memphis, Tenn., is now in operation.

Nashua Corp., Nashua, N. H., has appointed **Roland K. Fraser** as product development manager. Mr. Fraser will



*W. F.
Mulvaney*

Put Your Product in the Shelf Package that says:

Buy Me!



Bemis CONSUMER-SIZE Paper Bags

with the crispest, brightest printing your brand ever had

Your brand SINGS...
it gets EXTRA selling
power... when it's on a
Bemis Consumer-size Paper
Bag. No other bag-maker
can beat—and few, if any,
can equal—our high
fidelity to detail and
color. Ask your
Bemis Man for the
complete story.

One of these is
the winner you need . . .



Bemis
Deltaphane

Bemis
Flexi-Carton



Bemis
Cellophane

Bemis



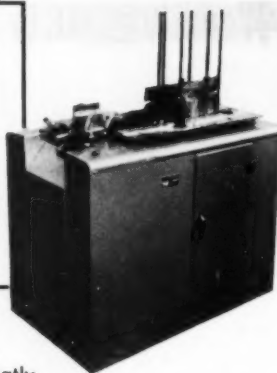
General Offices—St. Louis 2, Mo.
Sales Offices in Principal Cities

REDUCE LABOR COSTS

with the

TUCK-O-MAT

tuck end carton set-up machine



The Model 50 TUCK-O-MAT needs the part-time of only one attendant and greatly reduces your cartoning labor costs. The TUCK-O-MAT is versatile and offers complete cartoning flexibility. Write for folder BI-2.

CHECK THESE ADVANTAGES!

- Handles wide range of carton sizes
- Output of 4,000 cartons per hour
- Quick changeover
- Small and easily portable

CONVEY-O-MAT

- The Model 54 CONVEY-O-MAT adds conveyor loading to the advantages of the TUCK-O-MAT. Delivers the set-up carton in upright position on the conveyor ready to receive your product.

MODEL 518 CARTON CLOSER

- Used with the CONVEY-O-MAT the Model 518 provides a complete cartoning system.

E. L. BIVANS, INC.

FORMERLY MACHINERY MFG. CO., INC.

2431 Dallas Street, Los Angeles 31, California

DIST. BY NEW JERSEY MACHINE CORP., HOBOKEN, CINCINNATI, CHICAGO, LOS ANGELES

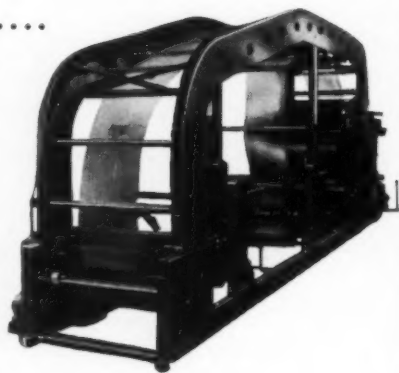
A GOOD PRESS + GOOD PLATES = GOOD PRINTING

The HUDSON-SHARP Flexographic Press

*performs at its
best with*

MOSSTYPES®

*...the pre-madeready
rubber printing plates*



The finest engines run at peak efficiency only with the right fuel. It's the same with flexographic printing equipment, too — for top-quality performance you have to team a precision-engineered press with precision-molded printing plates. That's why most leading makers check out their new presses with MOSSTYPES, the rubber plates you can always depend on for accuracy and uniformity.

Write for literature about
MOSSTYPE Rubber Plates



MOSSTYPE CORPORATION

33 Flatbush Avenue • Brooklyn 17, N. Y.

Plants and people

direct the department in initiating ideas for products in conjunction with the sales, manufacturing and research divisions, and will work with machinery manufacturers in the development of equipment for new paper products. **Carl E. Doane** has been promoted to assistant sales manager of the Gunning Div. Mr. Doane will be succeeded by **John D. Clark** as salesman in the New England territory of the Waxing Div. **Charles Leake** has been appointed salesman for waxed products in the Philadelphia region. **Walter P. McLaughlin** has been made specialty printing sales representative for the northern New England territory. Mr. McLaughlin will also handle gumming and waxing accounts in Maine and northeastern New Hampshire. **William J. O'Sullivan** has been appointed to a sales position in the Gunning Div. and **H. C. Hilbert** has succeeded **R. L. Newcomb** as Chicago salesman of gummed paper products.

F. Richard Meyer, III, has been made assistant to the president of **Acme Steel Co.**, Chicago. Mr. Meyer replaces **Christopher D. Norton**, who was elected vice president of **Acme Steel International Co.** and **Acme Steel Overseas Co.**, subsidiaries of Acme Steel.

E. I. du Pont de Nemours & Co., Inc., Wilmington, Del., has initiated an expansion program at two plants manufacturing Freon fluorinated hydrocarbon compounds for the rapidly growing aerosol industries. Ground has been broken at the Chambers Works plant of the Organic Chemicals Dept., Deepwater Point, N. J., and construction has begun at East Chicago, Ind.

Angelus Sanitary Can Machine Co., Los Angeles, manufacturer of can-closing machinery, has appointed the **R. P. Anderson Co.**, Dallas, Tex., to handle seamer sales in Texas, Oklahoma, Louisiana and Mississippi.

Kenneth Mason has been appointed special sales representative for **American Seal-Kap Corp.**, Long Island City, N. Y., which manufactures closures for dairy containers.

Bradley Industries, Inc., Chicago, manufacturer of rigid plastic boxes, has enlarged and remodeled its general offices and showrooms at 1652 N. Damen Ave.

Bemiss-Jason Corp., Redwood City, Calif., has promoted **Allen Marks** to the newly created post of Western sales manager

IT'S *Saran film*
—ADDED PROTECTION

Phiofilm

Polyethylene

UNILOX *
PROCESS OF PRINTING

SPECIALISTS
in the converting of Plastic
Films. Printed or plain bags,
tubes, sheets, rolls.

Plastic Films
UNION COMPANY
3520 S. MORGAN ST., CHICAGO 9, ILL.
* PAT. PENDING

**Modern Packaging That
Sells Fine Foods Faster**



Ivory

Gold Magic
Audubon

Oval Bouquet
with Tray

IVORY . . . 4 x 3 3/4 x 4. Ivory background with red design. Hinged Lid. Fine workmanship.

GOLD MAGIC . . . 3 1/2 x 4 x 4 1/2. Black background, red design. Slip Lid. Ideal for packaging cookies.

AUDUBON . . . 4 x 3 x 2. Black background with Audubon design. Hinged Lid. Excellent packaging for candy or nuts.

OVAL BOUQUET . . . 6 x 4 1/2 x 3. Green background with floral design. Hinged Lid. Distinctive packaging for coffee or tea.

Write for price list today!

HOFF • R. D. 7 • YORK, PA.

**EVEN THE RICH
CAN'T AFFORD
OVER-WEIGHTS!**



Today's profit margin is too thin to permit over-weights. Efficient packaging lines demand accuracy with their high speed weighing and filling. That's why manufacturers are changing to Hy-Tra-Lec weighing systems.

Hy-Tra-Lec is that amazingly accurate method of weighing. And with Hy-Tra-Lec, you get more than just an isolated weigher or weighers. **You get a system**, engineered for your particular operation; complete, if desired, with conveyors; integrated with other phases of your production-packaging line to permit efficient, dependable operation with minimum use of floor space.

Look ahead to more accurate, less expensive weighing and filling. Without obligation, get a Wright study and recommendation.

WRIGHT MACHINERY COMPANY

ESTABLISHED 1893 - DURHAM, NORTH CAROLINA
SUBSIDIARY OF THE SPERRY CORPORATION



Wright Machinery Company: Calvin Street, Durham, N. C.; 921 Bergen Avenue, Jersey City, N. J.; Michigan Square Building, 540 N. Michigan Avenue, Chicago, Illinois.
Edwin F. DeLine Company, 224 W. Alameda Avenue, Denver 9, Colorado. R. P. Anderson Company: 1122 Texas Bank Building, Dallas 2, Texas; 5643 Overbrook Lane, Houston 19, Texas; 925 N. Solomon Pl., New Orleans 19, La.

WRIGHT MACHINERY COMPANY

500 Calvin Street

Durham, North Carolina

Please send us latest literature on your Hy-Tra-Lec weighing systems.

NAME

TITLE

PRODUCT

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ADDRESS

CITY & STATE

Look at Your PACKAGE!



Does it have these LUSTEROID Advantages?

Does your package give you:

- MINIMUM WEIGHT
- PRODUCT VISIBILITY
- COMPLETE PROTECTION
- PRINT-ABILITY
- UNLIMITED COLORS
- SAVINGS IN LABELING
- SAVINGS IN HANDLING
- SAVINGS IN SHIPPING
- RE-USABILITY

LUSTEROID vials and tubes combine *all* these advantages in distinctive plastic containers to meet your standard or special needs. Sizes from 1/4" to 1 1/2" in diameter and lengths up to 6". Cork, slip-on, or screw-cap closures.

Write for
samples and prices.



12 West Parker Avenue, Maplewood, N.J.

Plants and people

of the Display-Tex Div., which produces corrugated display papers. Mr. Marks will headquarter in the company's main offices in Redwood City. **Louis Pappas** will cover the Eastern and Southern states.



P. J. Murphy

Peter J. Murphy has been appointed New York representative of the bottle division of **Elmer E. Mills Corp.**, Chicago. He will cover New York, New England and the Middle Atlantic states for the Mills company.

Eugene H. Kling has resigned as general manager of the Klingrose Gravure Div. of **American Type Founders**, Elizabeth, N. J. He will be available on a consulting basis to a limited number of firms in the printing industry.

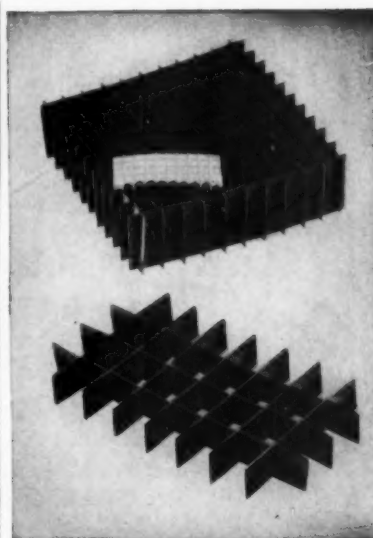
Robert G. Lewis has joined the New York sales staff of **The Lord Baltimore Press, Inc.**, package printing specialists. Mr. Lewis was formerly associated with the Farrington Mfg. Co.

The Office of the Quartermaster General has awarded a research and development contract to **National Starch Products, Inc.**, New York, for the development of an improved adhesive for packaging of Quartermaster items for overseas shipment. The program calls for an adhesive which will seal closures on all types of waterproof barrier materials, case liners, fibreboards and coated papers. Studies will also be conducted to determine the effects of various treated surfaces of barrier material and fibreboard on the bonding properties of adhesives.

National Container Corp., New York, has appointed **William Bofenkamp** as general sales manager for the territory consisting of Montana, Wyoming, North Dakota, South Dakota, Nebraska, Minnesota and portions of Iowa and northwestern Wisconsin, with headquarters in St. Paul.

Ohio Boxboard Co., Rittman, Ohio, has purchased **Valley Containers, Inc.**, Youngstown, Ohio, formerly a subsidiary of Ottawa River Paper Co., Toledo.

Brown & Bigelow, St. Paul, Minn., advertising specialties firm, has purchased the **Western Lithograph Co.**, Los Angeles. Western Litho will continue to operate under its present name as a separate corporation. **Charles A. Ward**,



PROTECT WITH PARTITIONS!

Solve YOUR
Internal Packaging Problems

SAFELY—SECURELY!

Made to Your
Exacting Specifications
for Pharmaceuticals
Candy
Heart Box Inserts
Collapsible Tubes
Toys and other fragile items

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MODERN PACKAGING

president of Brown & Bigelow, has been named board chairman and **John L. Davidson**, former executive vice president of Western Litho, has been elected president of the new firm.

Container Laboratories, Inc., New York, has opened an engineering office at 1519 Connecticut Ave., N.W., Washington, D. C. The office, under the supervision of **Thomas P. Wharton**, is presently engaged entirely on Government projects.

James G. Murdock has been appointed manager of the Paper Specialty Sales Div. of the **Cromwell Paper Co.**, Chicago. Mr. Murdock will be responsible for the firm's industrial and building papers.

Majikweld of California, Inc., polyethylene bag converters, and **Coseco** ("Coast Service & Converting"), custom converters and mill agents, both of Los Angeles, have joined forces. Coseco will take over all sales functions and product development, enabling Majikweld to concentrate on production and research. Majikweld's sales division is now listed c/o Coseco, 1300 Santa Fe Ave., Los Angeles 21.

Howard E. Whitaker, president of **Mead Corp.**, has moved his headquarters to the firm's main office at 118 W. First St., Dayton, Ohio. Mr. Whitaker will continue to spend part of his time in the company's operating offices at Chillicothe.

Gale Dorothea Mechanisms, Elmhurst, L. I., N. Y., has opened a sales and display office at 274 Madison Ave., New York. The office will be used primarily for demonstrating animation devices.

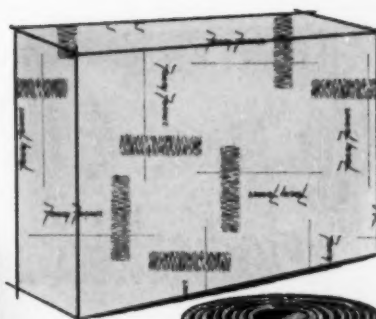
Sealright Co., Inc., Fulton, N. Y., has appointed **Thomas J. Meagher** New England manager and manager of the Boston office. Mr. Meagher, who has been with the company for 28 years, succeeds **Flavel W. Payne**, who has been placed in charge of a new Sealright sales division consisting of Maine, New Hampshire and Vermont, with headquarters in Boston. Mr. Meagher will be succeeded in the northeastern Ohio and northern West Virginia territory by **Ronald G. Smith**.

Pollock Paper Corp., New York, has appointed **W. A. Rike** as director of package design. Mr. Rike has been in the food-packaging field for 34 years.

Imco Corp., Kansas City, Mo., manufacturer of plastic jars and bottles, has appointed **Richard V. Vosburgh**, former sales manager, as vice president.

Ekco Products Co., Chicago, housewares manufacturer, has established a new industrial foil packaging section in its specialty sales division. The new section will be staffed by engineers who will assist manufacturers of food and other prod-

We've made it Easy—



DECORATED bundle wraps, box covers, automatic package wraps.

Slip-easy GLASSINE for inter-leavers, wrappers and cups.

GREASEPROOF individual and bulk popcorn bags—duplex nut bags.

SUPER-CALENDERED chocolate dip papers.

MOISTURE VAPOR-PROOF fruit powder envelopes.

STICK-PROOF bulk candy bags—and case liners.

For industry leaders to combine DECORATION with PROTECTION

Stimulated sales through eye-appealing decoration, in addition to protection, are yours with THILCO packaging papers. Full color range base papers, numerous standard embossed and printed background patterns, plus "customizing" by aniline or rotogravure printing combine to provide the largest selection of consumer winning decorative packaging ever presented. Whether your requirements are for box coverings, counter rolls, bundling, case liners or automatic package wrapping, you'll find THILCO papers specially made for the job — All, as functional in protective value as your needs may demand. Write for further information and samples.



Use Thilco printed GLASSINES for flavor-saving, better selling candy wraps.

NEW YORK • CHICAGO

Thilco

Functional Papers FOR PROTECTION THAT COUNTS!

MINNEAPOLIS
DETROIT • CINCINNATI

THILMANY PULP & PAPER COMPANY
KAUKAUNA, WISCONSIN

If you've a product to wrap
*You'll want this
 new booklet—*



write for it
 today —
 on your business
 letterhead

The perfect wrapper for

CANDIES AND CONFECTIONS
 FOODS AND BAKERY PRODUCTS
 PREPACKAGED TABLE MEATS,
 BACON, CHOPS AND PATTIES
 ICE CREAM BARS, NOVELTIES
 CITRUS FRUITS, VEGETABLES,
 CHEESE, DAIRY PRODUCTS
 HARDWARE, MACHINE PARTS
 TISSUES, NAPKINS, TOWELS,
 PAPER AND CLOTH SPECIALTIES
 BANDAGES, SOAPS,
 PHARMACEUTICALS AND 101
 VARIED ITEMS OF REGULAR
 AND IRREGULAR SHAPE

FOR THE ARMED FORCES
 We are contributing to the na-
 tion's defense program by pro-
 viding a large part of our in-
 creased production facilities for
 building precision armaments.

NEW YORK • 55 E. 42nd St.

DESCRIBES HOW PRODUCTS OF EVERY DESCRIPTION ARE AUTOMATICALLY PACKAGED FASTER — CHEAPER — BETTER!

- Wraps 100 to 300 Units per minute!
- All rotary, automatic continuous feed motion
- Float wraps products of regular or irregular shape
- Positive heat or glue and crimp sealing
- Uses all types of modern wrap materials
- Single operator can tend several machines at same time
- Saves materials—no trays or stiffeners, unless desired
- Special automatic feeds, labelers and code daters



Plants and people

ucts with their packaging and merchandising problems. Ekco's institutional sales section, directed by Henry Casey, has begun the distribution of foil containers through hotel and restaurant jobbers.

John W. Greve has been appointed manager of the Waxed Paper Div. of Paterson Parchment Paper Co., Bristol, Pa. Mr. Greve joined Paterson in 1950 and has assisted in the development of waxed-paper sales since that time.



J. W. Greve

St. Regis Paper Co., New York, has appointed Frank W. Myers, Jr., as assistant manager of the Great Lakes Sales District of the Multiwall Bag Div. Mr. Myers will assist Charles A. Woodcock, vice president and district manager of St. Regis Sales Corp., a subsidiary, in the sales of multiwall bags in the Midwest, with headquarters in Chicago. William T. Orr has been made supervisor of multiwall bag sales in the St. Louis and Kansas City territories. Salesmen in Kansas City are Robert P. Worden and Thomas A. Patterson; in St. Louis, W. Malcolm Lowry and Clifford E. Freeman. Jack A. Larigan has been made supervisor of multiwall bag sales in Minnesota, Iowa, North Dakota, eastern South Dakota and northern Wisconsin, with headquarters in Minneapolis. Minn. B. F. Alm is the representative for Iowa and eastern South Dakota, while William H. Foran will be sales representative for Minnesota, North Dakota and northern Wisconsin.

Speedways Conveyors, Buffalo, N. Y., manufacturer of materials-handling equipment, has moved into a new plant at 202-208 Rhode Island St., Buffalo 13.

Sutherland Paper Co., Kalamazoo, Mich., has appointed James M. Riley as assistant general manager of its Paraffined Carton Div. Mr. Riley will be responsible for the operation of the division. Richard Brewer will succeed Mr. Riley in the Philadelphia area, where he will service jobber and food chains exclusively.

Under a re-organization and expansion program, Thilmany Pulp & Paper Co., Kaukauna, Wis., manufacturer of specialty papers, has divided its sales organization into three divisions. The Midwest Sales Div., including Illinois, Wis-

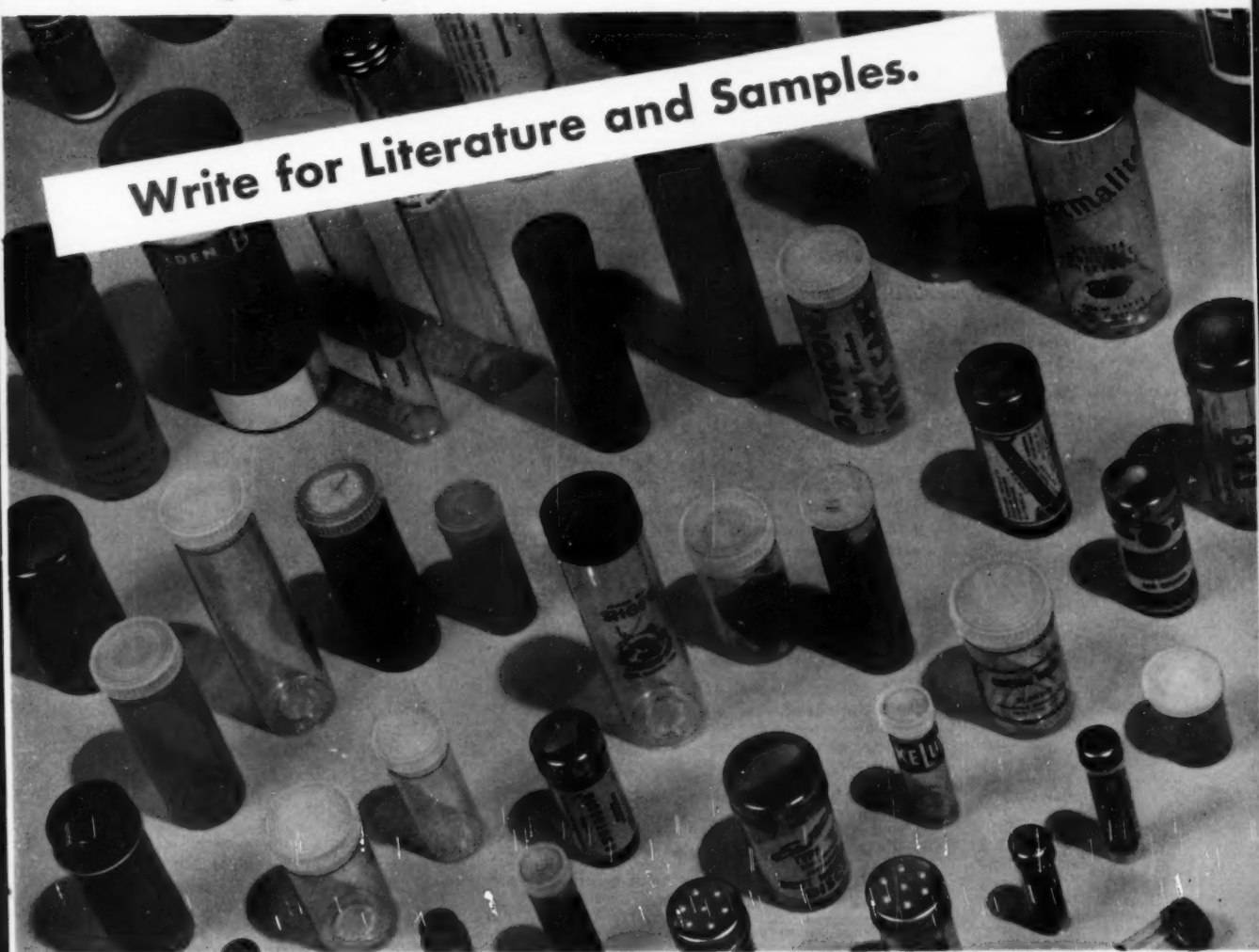
MODERN PACKAGING

THE SPARK THAT BLOWS

SALES SKY HIGH

Countless manufacturers who package their products in Clearsite Transparent Plastic Containers have found them the spark that "touched off" a resounding boom in sales. Moisture-tight, shatter-proof, sales-bright, these feather-light containers slash shipping costs to the bone. Available in a complete range of sizes and adaptable for many types of closures. Special sizes also made to your specifications. YOUR label and trade-mark can be multi-color printed right on the container for extra eye-popping appeal.

Write for Literature and Samples.



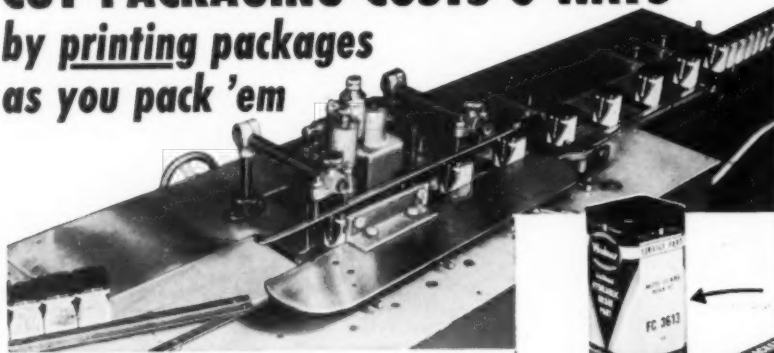
TRANSPARENT

Plastic CONTAINERS

*Registered trade-mark

CELLUPLASTIC CORPORATION • General Offices: 50 Avenue L., Newark 5, N. J.

CUT PACKAGING COSTS 6 WAYS by printing packages as you pack 'em



If you make more than one product—or your product comes in different colors, sizes, flavors, etc.—the Gottscho MARKOCODER will save you money. This is the machine that enables you to use a common package for your whole line by printing names, numbers, other product identification on one or more blank panels of partially-printed cartons, boxes, cans, canisters, jars, etc. . . . automatically, as part of the packaging operation. Consequently, it slashes package inventories . . . reduces labor costs . . . cuts unit package costs . . . prevents down-time on the line . . . eliminates loss from obsolescence . . . simplifies inventory control.

(P.S. The MARKOCODER package printing method also costs less, is more efficient than labelling or separate-operation imprinting.)



Write for descriptive MARKOCODER brochure today



ADOLPH GOTTSCHO, INC.

Hillside 5, N. J.

**50TH
YEAR**

**PAPER, PLASTIC
CONVERTERS!
PACKAGE
MANUFACTURERS!**

These NEW Machines can help give you **BIG SAVINGS INCREASED PRODUCTION!**



Ask about our complete line of
HAND-OPERATED CUTTERS
for faster, easier cutting of soft
materials up to 10 ft. wide.



Write for details about each machine!
MANUFACTURING CO., 27 SALISBURY ST., WORCESTER 5, MASS.
Chicago office at 549 West Washington Blvd.

Automatically feeds, controls, measures, and cuts soft "in-process" materials to uniform sheet sizes! Designed for easy handling of paper, plastic, cloth, etc. up to 60" wide from extruders, laminators, "in-process" operations, or from rolls and sheets. Uses electronic measuring device and precise controls for accurate, low cost operations. Processes material at rate of 10 to 100 feet a minute, depending on length of cut. New slitting attachment and special feeding and take-away devices are available for any production set-up.

Cuts labels, tickets, display cards, etc. directly from the sheet. This unique machine, long-used in England and Europe, is now available to U. S. manufacturers. It eliminates extra operation of cutting sheets into squares before die cutting. Fast, accurate, easy to operate!

Handles soft materials up to 60" wide. This larger model slitter and rewinder was designed for more effective slitting of wide materials usually difficult to handle. Shear type, contact type, and razor blade cutters available.

NEW Hobbs "Alquist" Winder winds materials at constant tension!



SETS a new standard for winding all types of materials! Tension is kept constant electrically throughout winding operation. Features much greater efficiency and accuracy.

Plants and people

consin and all states west of the Mississippi, will be supervised by **H. O. Peters**, Thilmany vice president, with headquarters in Chicago. Mr. Peters will be assisted by **Vern G. Haag**, who was transferred from the mill sales division. Also included in the Midwest Div. is the Minneapolis branch, which will continue to operate under **Bert S. Johnston**.

J. T. Thomas has been named manager of the Central Sales Div., with offices in Detroit. Mr. Thomas will be assisted by **L. A. Schiedermayer**. A new Cincinnati office will be under Mr. Thomas' direction. The Central Sales Div. covers the eastern half of the United States, except New York, Pennsylvania and Maryland. The new Cincinnati branch will be supervised by **R. E. Bloomstrand**.

The New England states, Pennsylvania, New York and Maryland comprise the Northeast Sales Div., to be managed by **L. R. Graef**, with offices at Ridgewood, N. J. Mr. Graef will be assisted by **James J. Fitzpatrick**.

C. L. Dostal has been made assistant sales manager and **D. J. MacDonald** has been placed in charge of sales of decorated and box cover papers at Thilmany.

Lyman W. Dack, formerly of Dun & Bradstreet, has been made manager of the Client's Service Div. of **T.A.B. Engineers, Inc.** (Technical & Business Engineers), Chicago. Mr. Dack will head a program of expanding the services of technical and management divisions.

The Hawaiian Sugar Planters' Assn. By-Products Project, San Francisco, has appointed **T. J. Nelson** as assistant to **G. W. Aljian**, coordinator of the By-Products Project. Mr. Nelson is on loan from the California & Hawaiian Sugar Refining Corp.

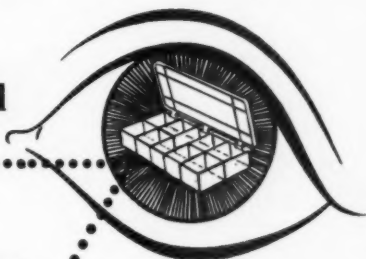
W. Howard Winters has been promoted to West Coast district sales manager of the Cryovac Div. of **Dewey & Almy Chemical Co.**, Cambridge, Mass. Mr. Winters will supervise sales of Cryovac plastic bags and the Cryovac process to meat packers, supermarkets and chain stores in California, Arizona, Nevada, Washington, Oregon, Idaho and part of Montana. He will headquarter at San Leandro, Calif.

Mortimer Fleishhacker, Sr., president of the **Fleishhacker Paper Box Co.**, San Francisco, died on July 13, just prior to his 87th birthday.

does your package have

**eye-
appeal**

**buy-
appeal?**



Customers reach for the product in the eye-catching package. A sparkling, new GILBERT PLASTIC package specially designed for your particular needs will make them reach for yours!



GILBERT PLASTICS is equipped to handle all your packaging problems from the planning and designing stage to the finished product. Give your product *eye-appeal* to insure its *buy-appeal*. Contact GILBERT PLASTICS today!

GILBERT PLASTICS, INC.
1415 Chestnut Ave., Hillside 5, N. J.

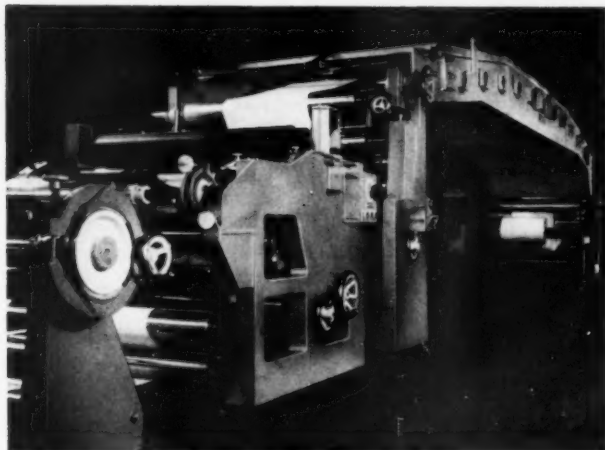


For Labeling, Packaging,
Pricing, Advertising,
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Coding, Trademarking

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laminates, colors, coats great variety of materials at high speeds. Diversifies output of small converter, eliminates machinery or multiple passes for the large converter. A complete package, including dryer, requires no attachments or additional purchases.

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LAMINATES, COLORS, COATS FOIL, FILM OR PAPER

- Glue or heat-seal laminating, plus coating or coloring, on one pass through machine.
- Runs foil and film from light to heavy gauge; paper from tissue to 30 pt. board. Foil or film feed-in mechanism compensates for variations in roll.
- Runs free hard or annealed foil successfully from .00035 up.
- Method of glue application may be chosen to fit individual job.
- Coloring, coating, or print-treating precision units; permits endless design printing; takes wide range of cylinder diameters.
- Rewind section equipped with heated nip-roll, thermostatically controlled, and large water-cooled rolls.
- Constant tension rewind assures smooth operation and solid rolls in wide ranges of diameter.
- Heavily built throughout for high production speeds.
- Built on unit principle; additional combinations may be obtained.

Complete DuPont service helps

CELLOPHANE

Problem: To give bread and other baked goods sparkling visibility . . . extra protection for freshness . . . wrapping that stays neater longer. Answer: Du Pont MST-51 Cellophane.



ACETATE FILM



Problem: To create an eye-catching package that shows bright colored yarns to best selling advantage. Answer: Sparkling Du Pont Acetate film laminated to an entire carton with die cut, providing large area of visibility

POLYETHYLENE FILM

Problem: To package pieces of silverware individually . . . protect against dust and tarnishing . . . while giving transparent display to each item. Answer: Tough, transparent moistureproof Du Pont Polyethylene Film.



solve your packaging problem

**Du Pont works with you to choose the best film;
to get the most practical package construction;
to make your package fit today's buying trends**

You can call on Du Pont's packaging experts to help you with every angle of effective package design and construction. They'll help you select the film that's best suited to the needs of your product. Du Pont offers 115 varieties of three basic films—Cellophane, Polyethylene and Acetate. You can get a film that's highly moistureproof, or one that permits graduated moisture loss. One that's dimensionally stable, or one that conforms to irregularly shaped objects. A film that provides brilliant luster, or one that stays tough and flexible at sub-zero temperatures.

You'll get help, too, with every question of package construction. Twenty-five years of experience and continuing research on the more efficient use of packaging films support Du Pont's recommendations.

And to make sure your package is in line with modern shopping trends, you have the opportunity of reviewing Du Pont's up-to-date surveys of consumer buying habits. Get in touch with your Du Pont representative. He'll be glad to help you. Check with your converter of Du Pont packaging films for information on bags and printed materials. E. I. du Pont de Nemours & Co. (Inc.), Film Department, Wilmington 98, Delaware.

Only Du Pont gives you all these packaging aids:

- 1. WIDE VARIETY OF PACKAGING FILMS** scientifically tailored to meet the needs of varied products and packages.
- 2. TECHNICAL** assistance to help you plan the most practical and efficient construction of your package
- 3. MERCHANDISING** help through continuing nationwide surveys of buying habits, to keep your package up to date.
- 4. NATIONAL ADVERTISING** to continually strengthen consumer preference for your packaged products.

DU PONT PACKAGING FILMS

**CELLOPHANE
POLYETHYLENE • ACETATE**



**Better Things for Better Living
... through Chemistry**

For your information

A two-point 15-week course on Package Engineering has been announced by Columbia University's School of Engineering. Lectures are scheduled for Wednesday evenings from Sept. 30 to Jan. 20. Packaging and packing techniques will be presented, with particular emphasis on the physical and engineering principles, and lectures will be given by 16 packaging authorities under the supervision of Prof. Frederick C. Winter: Dr. Kenneth W. Brighton, American Can Co.; Walter J. Byrd, Standard Brands, Inc.; Frank Cohen, New York Ordnance District, U.S.A.; F. V. Deaderick, Bemis Bro. Bag Co.; Thomas E. Dobbins, American Can Co.; Walter C. George, Gaylord Container Corp.; Dr. L. G. Ghering, Preston Laboratories; Maj. Frank W. Green, industrial packaging consultant; William E. Hughes, National Wooden Box Assn.; Glenn Mather, Fibre Drum Mfrs. Assn.; Paul H. Paulsen, Wm. H. McGee & Co., Inc.; Frank Poeta, Paper Shipping Sack Mfrs. Assn.; Dr. Lawrence T. Ross, Union Bag & Paper Corp.; Henry W. Stevens, Continental Can Co.; Earl R. Stivers, Stapling Machine Co.; Dr. Charles M. Woodcock, General Foods Corp. Tuition is \$50 and the course is open to the general public as well as to students earning credits for bachelor or other degrees. The 1954 edition of the *Modern Packaging Encyclopedia* will be required reading for the course.

The second annual Aerosol Festival will be held in conjunction with the 40th annual meeting of the Chemical Specialties Mfrs. Assn. at the Mayflower Hotel, Washington, D. C., Dec. 7-8. The best aerosol packages of the year will be judged and selected from seven different product classifications: insecticides; moth products; room deodorants; lacquers, paints, enamels; other household products (waxes, polishes, etc.); personal products (shave lather, shampoos, body deodorants, hair lacquer, etc.); miscellaneous (novelties, drugs, lubricants, etc.). A top award will also be made for the "best in the show." Further information may be had from the Aerosol Festival Committee, Chemical Specialties Mfrs. Assn., 110 E. 42 St., New York 17.

The association has announced publication of its "Manual for Vendors and Fillers of Aerosols and Pressurized Packages." The booklet is an assembly of recommendations and developments of the Committees of the Aerosol Division of the association in cooperation with the Fire Department of New York City and other cities, the Bureau of Explosives of the

Assn. of American Railroads and others. A limited number of copies is available and may be obtained on request to the association's headquarters in New York.

The 2nd Canadian National Packaging Exposition to be held at the CNE Automotive Bldg., Toronto, Nov. 3-5, is expected to be one of the largest trade shows of its kind ever held in Canada. There will be some 252 display units comprising 41,000 sq. ft. of display space, as compared with 160 units and 23,000 sq. ft. of space used for last year's show.

In response to many requests, Michigan State College has published the complete proceedings of the **Joint Industry Conference on Packaging and Preservation**, sponsored in cooperation with General Motors Corp., which was held on the East Lansing, Mich., campus April 9 and 10. Dealing with many aspects of military packaging problems, the conference consisted of reports by 12 technical experts in six pairs of talks, one speaker in each pair representing the military. Subjects included Greaseproof Barriers, Bags, Water-Vaporproof Barriers, Waterproof Barriers, Peelable Plastics and Rigid Barriers. Summaries of each session as well as complete texts of the 12 talks are included in the 79-page mimeographed volume. Copies are available at \$1 each. Requests should be addressed to the Bureau of Public Service, Michigan State College, East Lansing, Mich., and checks should be made payable to the college.

The Advertising Trades Institute, Inc., will hold its second **Advertising Essentials Show** Nov. 17-18, Hotel Biltmore, New York. The show covers the package design, display and graphic arts fields. Robert G. Hazelton has been named managing director of the institute.

The American Society for Testing Materials has issued a new 104-page edition of the "Symposium on Conditioning and Weathering," designed to promote an expanded understanding of the importance of conditioning and weathering in the assessment of such materials as paper, adhesives, textiles, plastics, etc., and to encourage further effort to utilize controlled atmospheric phenomena in laboratory procedures. The papers and discussions contained in this publication were presented at the 55th annual meeting of the ASTM. Copies, priced at \$2.25 each, are available from ASTM Headquarters, 1916 Race St., Philadelphia 3.

To meet the need for technical training in the field of packaging, **Purdue University** is inaugurating the **Packaging Institute**—a four weeks' course to be offered periodically through the year, with the first three being scheduled to start Sept. 28, Oct. 26 and Jan. 4. The Institute will provide related technical information for persons employed in packaging in industry, transportation and the military services. Studies to be covered include the packaging engineer and his tools, the chemistry of corrosion, applied mechanics in relation to packaging, vibration problems in transportation, strength of materials, container design, and atmospheric, pest and radiation hazards. Also included will be the characteristics of packaging and container materials, transportation agency shipping requirements, analysis of prize-winning packaging, cost and economic considerations. Each course will include a field trip and at the completion of the course each member will receive a certificate of achievement. The curriculum was developed under the guidance of an advisory committee which worked with the university staff. For information on the course, write to **Mart I. Fowler**, chairman, Division of Adult Education, Engineering Administration Bldg., Purdue University, Lafayette, Ind.

The Goodyear Tire & Rubber Co. has just published an illustrated packaging manual for self-service cheese which shows wrapping techniques on wedge, rectangular and half-moon cuts with 75-

What's Doing

Sept. 14—**Eastern Frosted Food Assn.**, annual meeting, Advertising Club, New York.

Sept. 17—**Central States Frozen Food Assn.**, annual meeting, Hotel Sheraton, Chicago.

Sept. 20-23—**Packaging Machinery Mfrs. Institute**, 21st annual meeting, Skytop Lodge, Skytop, Pa.

Sept. 27-30—**National Assn. Food Chains**, Palmer House, Chicago.

Oct. 6-8—**Produce Prepackaging Assn.**, 3rd annual exposition and convention, Chase Hotel, St. Louis, Mo.

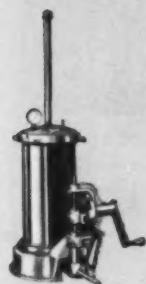
Oct. 11-13—**Brewers Assn. of America**, Trade Show, Chicago.

Oct. 12-14—**Packaging Institute**, 15th Annual Forum, Statler Hotel, New York.

Oct. 12-14—**American Hardware Mfrs. Assn.**, Atlantic City.

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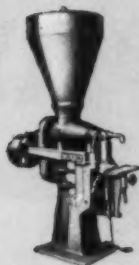
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FILLER FOR PASTES
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FOR PASTES AND
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LARGER TUBES OR
JARS.

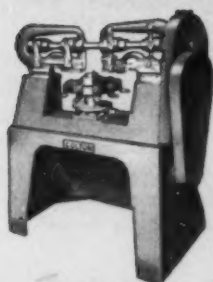


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FILLING REQUIREMENT, FROM LIQUIDS TO HEAVY ABRASIVE PASTES**



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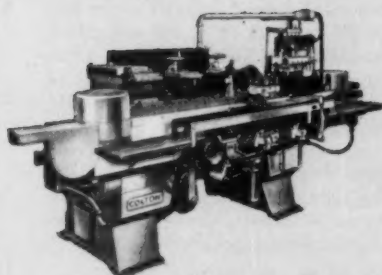


NO. 107 LIQUID FILLER
— BENCH TYPE, FOR
CANS, BOTTLES, JARS,
ETC.

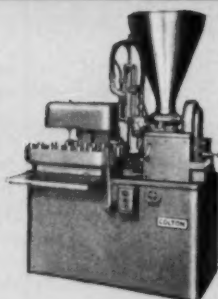


NO. 103 FILLER, CLOSER
AND CRIMPER, FOR
TUBES OR BOTTLES.

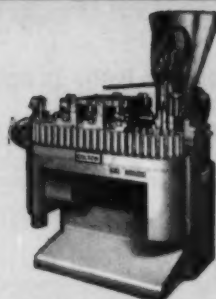
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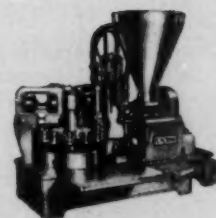
NO. 190 TUBE FILLER,
CLOSER AND CRIMPER,
COMPLETELY AUTO-
MATIC.



NO. 175 TUBE FILLER
AND CLOSER, AUTO-
MATIC, SINGLE OR
TWIN.



NO. 180 TUBE FILLER
AND CLOSER, AUTO-
MATIC, SINGLE OR
TWIN.



NO. 160 TUBE FILLER
AND CLOSER, AUTO-
MATIC, BENCH TYPE.

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NON-TOXIC

Some food wrappers that supposedly are giving safe protection, may be harmful to the flavor and quality of the food. Even a faint trace of toxicity in a wrapper that comes in direct contact with food can be dangerous.

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You can have utmost confidence in Patapar Vegetable Parchment. This high wet-strength, grease-resisting vegetable parchment is made from 100% pure cellulose. It is odorless, tasteless and absolutely NON-TOXIC. It meets every requirement of the Federal Food and Drug Act.

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Patapar
Vegetable Parchment
HI WET STRENGTH - GREASE-RESISTING

For your information

BF Pliofilm. The manual is technical in nature and contains a section on weighing and labeling. It should be of value to self-service operators in training wrapping personnel. For copies, write Goodyear's Pliofilm Dept., Akron 16, Ohio.

The Michigan chapter of the Society of Industrial Packaging & Materials Handling Engineers recently elected the following new officers: president, **Darrel A. Buhlman** of Ford Motor Co.; executive vice president, **Alfred G. Woodcroft** of General Electric Co.; vice president, **Charles E. Cumiskey** of Cumiskey & Associates; vice president, **Elmer Hamina** of McCarthy-Root Co.; treasurer, **William S. Montford** of Consolidated Freight Co.; secretary, **Hugh D. Campbell** of the Detroit Board of Commerce.

The U. S. Circuit Court of Appeals on July 1 sustained the decision of the Federal District Court, Boston, which had held that the **S. D. Warren Co.** had infringed a patent held by the **Nashua Corp.** covering a product with a delayed-action adhesive.

The **International Paper Box Machine Co.**, Nashua, N. H., has appropriately marked its 50th anniversary with an elaborate hard-cover book entitled "Fifty Years of Progress—1903-1953." The company was established by **Elie W. Labombarde**, who produced the first automatic gluer, and operation of the firm is still controlled by the Labombarde family. **Harold S. Labombarde**, a son of the founder and general manager of the firm until his death in 1951, was recognized as one of the 20 leading inventors in the country when the 150th anniversary of the U. S. Patent Office was observed. He made many significant contributions to the paper-box machinery field. From its modest beginning, the company has grown international in scope, with representation in Canada, Great Britain, New Zealand, Australia and South Africa.

Frank H. Wright has been made assistant West Coast manager of **Glass Container Mfrs. Institute**, San Francisco.

P. J. Underwood has been appointed executive secretary of the **Society of Plastics Engineers, Inc.**

Photoswitch, Inc., has published a revised edition of its book, "Cutting Production Costs with Electronic Controls." How standard packaged electronic controls have solved many problems of weighing, counting, measuring, timing

**You'll want
these facts
on . . .**



**The
newest note
in packaging . . .**

**POLYETHYLENE
FILM AND TUBING**

**EXTENDED BY
IRVINGTON
VARNISH & INSULATOR COMPANY**
28 Argyle Terrace, Irvington 11, New Jersey
Plants: Irvington, N. J.; Moorpark, Calif.; Hamilton, Ont., Can.

**IVITHENE
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**Here's a new name in packaging materials—
IVITHENE . . . from a company
with almost 15 years' experience in plastic extrusion**

IVITHENE is polyethylene extruded in film, lay-flat tubing and heavy sheeting. It offers all the remarkable advantages of top quality polyethylene and has achieved wide acceptance as material for drum liners, multiwall bag liners, textile wraps, produce packaging and fabricated containers.

And it offers an important additional advantage—Irrington's extensive production facilities permit unusually prompt delivery to users—both large and small.

For information on characteristics, suggested applications and technical properties, just mail the coupon below for your copy of our IVITHENE booklet on packaging materials.

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MP-9/53

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"Dealers are sold on our quality line and on our distinctive M. E. display box. Precision-printed to resemble fine leather . . . it protects our tapes . . . has re-use value for customers."



LICKS STORAGE PROBLEM!

"A new display for a new line doubled our box inventory . . . but created no storage problem! We store M.E. 'flats' for both lines in 20% of the space required for ordinary boxes."

SAFER HANDLING . . . FASTER INVENTORY!

"We use M.E. exclusively for materials handling and inventory control. Parts are fully protected during production, storage. We saved enough to pay for installation of the M.E. system after one inventory."



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PACKAGING • MATERIALS HANDLING • INVENTORY CONTROL

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For your information

and cycling is explained through 46 new case studies. Copies of the book may be had on request to Photoswitch, Inc., 77 Broadway, Cambridge 42, Mass.

Reynolds Metals Co. has published a revised and enlarged edition of the packaging manual, "Reynolds Aluminum Foil Packaging." The publication aims to familiarize the packaging engineer with the great variety of foil materials presently used and also provides, in handy reference form, technical data on package design and application. Basic information on foil packaging materials and techniques is given in this 68-page booklet, which is divided into five sections and includes a glossary of terms. Available at no cost to packaging engineers and technical men who request it on company letterhead, the booklet, to others, is priced at \$1 per copy. Address requests to Reynolds Metals Co., 2500 S. Third St., Louisville 1, Ky.

Fred W. Spannagel, program chairman for the 3rd Annual Conference and Exposition of the Produce Prepackaging Assn., to be held at the Chase Hotel, St. Louis, Mo., Oct. 5-8, has arranged an informative program designed to aid prepackagers attending the sessions. Scheduled as speakers are representatives of industry, Government and trade associations. Four seminar discussions are scheduled for Oct. 7. Exhibit chairman is M. E. Shank. Charles Rudolph is arrangements chairman. Feature of the annual banquet to be held Oct. 7 will be the presentation of the 1953 Produce Prepackaging Award.

More than 300 entries will be displayed at the Package Designers Council's Package Design Awards Exhibition, Park Lane Hotel, New York, Oct. 21-22. The two-day exhibit will be in the hotel's Petits Salons, which will be open to the public from 9 a.m. to 9 p.m. A public luncheon will take place at the hotel's Tapestry Room on Oct. 21, when panels of judges will make awards to top packages in eight categories and also present honorable mention certificates. Irwin D. Wolf, chairman of the awards panel, will present the Irwin D. Wolf Award to the outstanding entry among the first-prize winners.

The Point-of-Purchase Advertising Institute, Inc., has announced two new membership classifications in addition to its regular membership. A "Company Associate Membership" has been established for companies interested in confidential point-of-purchase research information, bulletins, pamphlets and information serv-



Sheffield tubes

preferred by **JOHN H. BRECK, INC.**

Breck Cream Treatment for Beautiful Hair, is one of the many fine hair preparations offered by Breck. Quality of product is matched by the quality of the container—

Sheffield Collapsible Tubes. Product and container alike are the result of generations of leadership.

Compare for yourself this matchless excellence of printing on tube metals—an achievement of craftsmen schooled in Sheffield's century-long tradition of producing only the finest.

For gratifying sales results, we urge you to order all your collapsible tubes from Sheffield.

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New version of
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most widely
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Slightly higher with
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chute.

The Anderson Bagger, Model 134, is a simple, low cost machine that is doing an outstanding job for thousands of users in many industries. Operator can fill a bag and place it in a carton in one operation. Stainless steel bag chute, capacity 200 bags, adjustable to bag sizes. Blower, equipped with air filter, opens bag and keeps it free from foreign matter.

Easy to operate at high speed with a minimum of effort. Here is a machine that pays for itself quickly. Write today and tell us your product.



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diameters
from 1/4"
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Condenser tubes;
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Automatic machine
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economy dispensers for
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these and our new thermo
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ices, but who are not interested in voting or exhibiting privileges. This membership is designed for national advertisers, advertising agencies, publications, etc. The other is an "Individual Associate Membership" available to individuals in the point-of-purchase profession who, in the opinion of POPAI's directors, can benefit and contribute to the industry by membership and who are employed by firms who are Company Associate Members. Fee for each of these new memberships is \$100. POPAI's new membership committee is headed by **Dane F. Hahn**, chairman, and **Norton B. Jackson**, co-chairman. Membership applications may be obtained from Mr. Jackson at POPAI headquarters, 16 E. 43 St., New York 17.

The Durethene Corp. is offering a new polyethylene bag weight calculator. This handy tool computes the number of pounds of polyethylene film required to make 1,000 bags from any given width and gauge of plain or gusseted tubing. One side of the calculator contains a scale for tubular film and the reverse side computes the poundage required for flat film. The calculator can be obtained from the Sales Dept., Durethene Corp., 1859 S. 55 Ave., Chicago 50.

A new illustrated 12-page catalog describing the properties and uses of **American Cyanamid Co.'s** plastic materials has been published by the company's Plastics and Resins Division. Numerous applications are described for the firm's Melmac, Beetle, Laminac, Urac, Melurac and Melmac 305 materials. The catalog contains a comprehensive properties table listing, the table also being available as a separate folder. A "gluing-to-standards" guide in the adhesives section outlines military and commercial specifications met by these materials. Copies of the booklet may be had from American Cyanamid Co., 30 Rockefeller Pl., New York 20.

The **1954 Plant Maintenance & Engineering Show** (formerly called the Plant Maintenance Show) will be held Jan. 25-28 at the International Amphitheatre, Chicago. Concurrently, the **Plant Maintenance & Engineering Conference** will be held at the Hotel Conrad Hilton. The exposition will cover more than 100,000 sq. ft. of exhibit space—about a third larger than the 1953 show—and exhibitors are expected to number about 350. Advance registration cards may be obtained from **Clapp & Poliak, Inc.**, exposition managers, 341 Madison Ave., New York 17.

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Versatile web press combines fine gravure reproduction of halftones with economical flexographic printing of linework

This new in-line press makes it practical to do every class of work—from finest process color labels to ordinary counter rolls—on the same machine. Designed for quick, easy changeover from offset-gravure to flexographic processes, the DUAL-PROCESS PRINTER prints cellophane, foil, paper, glassine and boxboard alike. Available in printing widths to 60" and as many colors as required... with standard constant-tension rewinder or auxiliary sheeting, die-cutting, slitting equipment.



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does the rest**



The Model B-49 Straightline Vacuum Filler is a marvelous performer on any free-flowing liquids, semi-liquids, heavy liquids or foamy liquids. Quick on-the-job adjustment from one product to another or from one container size to another: minimum 1" to maximum 14" high is standard. Special for larger containers.

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Fast multiple filling of from 4 to 9 containers in one operation according to container size. Simple hand lever manipulation is the only manual operation on the machine, filling is as automatic as on a fully automatic filler. Product flow from storage to machine tank and from tank to filling mechanism all controlled automatically. Filling is uniform, clean and fast. Send today for Model B-49 Bulletin.

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World's Finest Flexographic Press WOLVERINE HYDRO-PRINTER



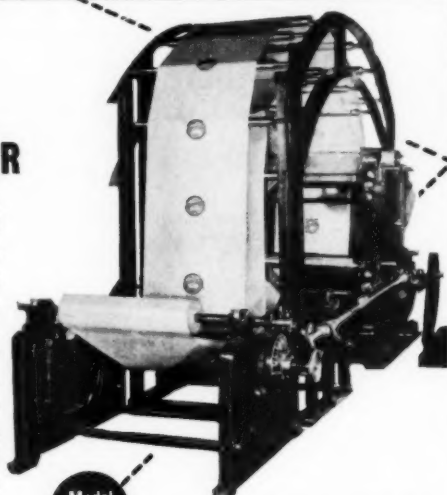
You, too, can be satisfied—satisfied with the quality of work you are producing; satisfied with the amount of production you are obtaining; satisfied with the number of repeat orders your customers are sending you—because the very day you start production on a Wolverine Hydro-Printer Model X-120 is the day that you

begin receiving the results that lead to satisfaction.

Specially equipped to handle the most difficult and toughest flexographic printing jobs the Wolverine Hydro-Printer Model X-120 is the finest press available today for the printing of any plastic film, acetate or cellophane. Its overhead drive allows high speed production on polyethylene, saran, vinyl and pliofilm and, of course, cellophane, foil and paper.

SPECIFICATIONS

1 to 5 colors
26" to 80" wide
Up to 40" standard repeat
Repeats to 60" available



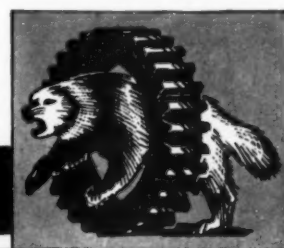
Model
X-120

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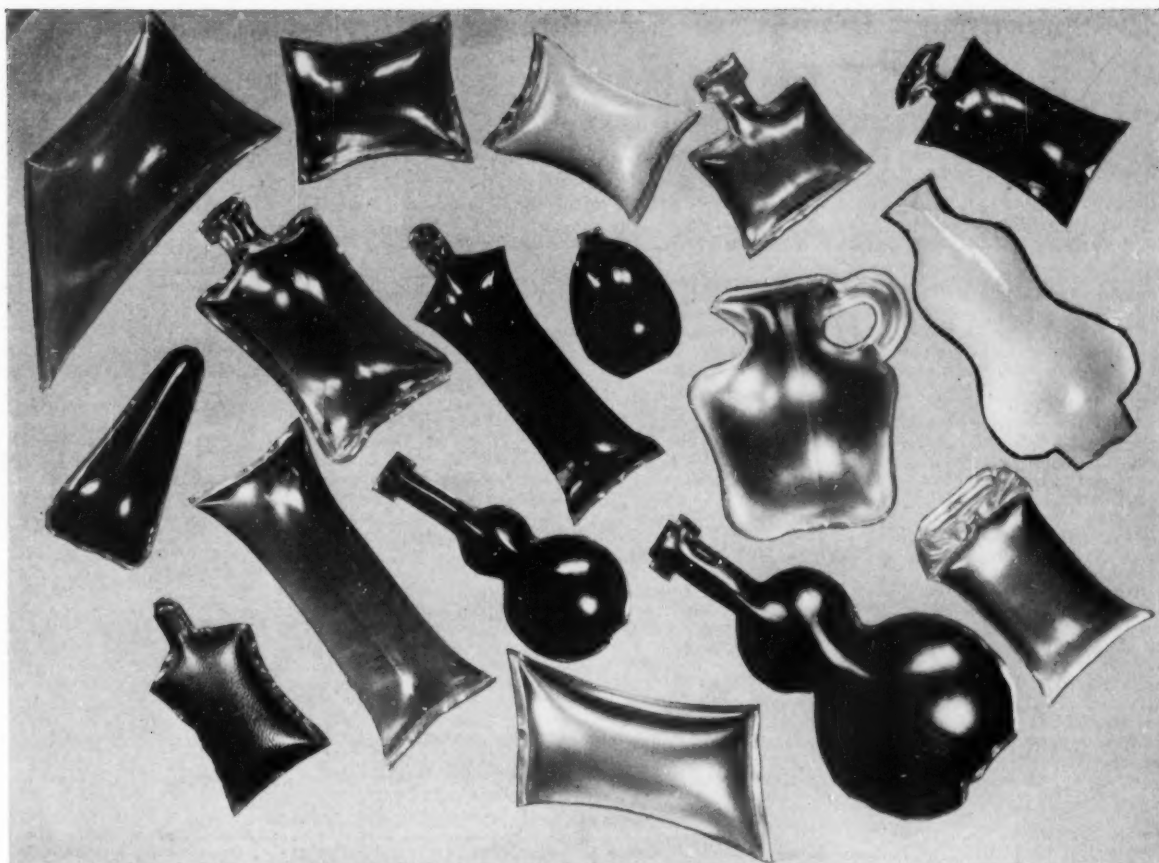
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U. S. patents digest

This digest includes each month the more important patents of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps not accepted. Edited by H. A. Levey

Apparatus for Cutting and Stacking Sheets, A. F. Sperling and W. E. Schroeder (to Samuel M. Langston Co., Camden, N. J.). U.S. 2,641,974, June 16. An apparatus for receiving and stacking successively delivered stiff sheets and delivering batches of such sheets, each batch comprising a predetermined number of sheets.

Carton, L. F. Prossen (to Celanese Corp. of America, New York, N.Y.). U.S. 2,642,183, June 16. A container for yarn comprising a carton, layers of yarn packages in said carton, a plurality of apertured shelves arranged in carton parallel to each other and each supporting a layer of yarn packages.

Label-Applying Mechanism, G. W. von Hofe (to New Jersey Machine Corp., Hoboken, N.J.). U.S. Re: 23,668, June 16. In a machine for forming and applying sheets to articles, means for supporting a supply stack of sheets, means for supporting articles to which the sheets are to be applied and having suction heads whereby the sheets are removed successively from the supply stack by one of said heads.

Bottle Filler, A. J. Lippold (to Cherry-Burrell Corp., Chicago, Ill.). U.S. 2,642,214, June 16. In a receptacle-filling device, the combination of a base, an outwardly extending bracket member rotatably mounted therein and adapted to be rotated therearound in a substantially horizontal plane, a receptacle holder secured to the outer extremity of said bracket and a container mounted over said bracket adapted to rotate therewith.

Machine for Making Paper Containers, B. A. Wittkuhns, H. G. D. Nutting and G. F. Hill (to National Paper Bottle Co., Inc., New York, N.Y.). U.S. 2,642,784, June 23. A container-forming machine including in combination a rotatably mounted turret having a series of body-supporting mandrels mounted in radial spaced relationship, a plurality of operating stations including a winding station, pressing station, a mouth-spinning station and a stripping station arranged in spaced relationship along the orbital path of travel of mandrels as defined by the rotation of said turret.

Machine for Making Paper Containers, B. A. Wittkuhns, H. G. D. Nutting and G. F. Hill (to National Paper Bottle Co., Inc., New York, N.Y.). U.S. 2,642,785, June 23. A container-body forming machine including in combination, a mandrel-supporting conveyor, a series of forming mandrels mounted in spaced relationship on conveyor, a plurality of operating stations arranged along the path of travel of said mandrel-supporting conveyor, operating stations being spaced in accordance with the spacing of mandrels on conveyor and including successively arranged winding, pressing, spinning and stripping stations.

Apparatus for Forming and Assembling Egg Cartons, J. Gilchrist (to Robert Gair Co., Inc., New York, N.Y.). U.S. 2,642,786, June 23. In apparatus for forming and assembling egg cartons of the class formed from a medially folded carton blank having slots adapted to receive a plurality of cross partitions, the upstanding walls of the medially folded blank being folded to overlie the cross partitions arranged in nested relation within slots thereof, the combination comprising means for supporting a slotted carton blank in medially folded position, a cross-partition feeding mechanism for feeding cross partitions to the slots of a carton blank in supporting means and including means for conveying cross partitions continuously toward a slotted blank resting in said supporting means.

Receptacle Having Hinged Cover, C. Castelli (to Columbia Protokosite Co., Inc., Carlstadt, N.J.). U.S. 2,642,987, June 23. A receptacle hinge structure interconnecting a first wall portion with a second wall portion to swing from a relatively coplanar relation to a substantially right angular relation comprising a pair of spaced hooks extending from first wall portion.

Carton for Commodities and Premium Display, C. C. Freeman (to Container Corp. of America, Chicago, Ill.). U.S. 2,642,988, June 23. A two-compartment display carton formed from a

single sheet of paperboard or the like, said carton comprising front and rear walls, two side walls, a centrally disposed vertical partition secured to the side walls, a top closure flap, and a bottom closure flap, the front and rear walls each having a plurality of cut-outs to support an article partially exposed beyond the wall in which it is supported.

Shipping Device, G. W. Deiser, Jr., H. D. Muise and W. A. Miller (to Robert Gair Co., Inc., New York, N.Y.). U.S. 2,642,989, June 23. A reel formed of paperboard comprising: a tube of rectangular cross section, end members formed of pieces of sheet material and each having an elongated aperture to receive one end of the tube, locking sheets associated with the tube extending from the tube and bent away from the center of the tube in juxtaposition to the end members and having reinforcing members within said tube spaced apart to define a passage centrally of the tube.

Tamperproof Container Closure, J. W. Soffer (to Development Research, Inc., St. Louis, Mo.). U.S. 2,643,015, June 23. A tamper-indicating replaceable cap for a container having a discharge portion with an outstanding lip portion, comprising a closure cap having a side-wall portion of hollow cylindrical form with an inner diameter fitting freely endwise over the lip portion and having opposed inwardly extending retaining portions.

Paper Container with Slip-Resistant Coating, I. V. Willson (to Monsanto Chemical Co., St. Louis, Mo.). U.S. 2,643,048, June 23. A packaging container characterized by a slip-resistant surface and having side walls and a top and bottom closure composed of an outer paper layer, said container having a discontinuous film of discrete particles of colloidal silica on the outer surface of said outer paper layer, silica being present in amounts of 0.01 to 5% based on the weight of the outer paper layer.

Quick-Opening Bag, H. L. Bartelt, Rockford, Ill. U.S. 2,643,049, June 23. A bag comprising two panels with opposed surfaces composed of material fusible above a predetermined temperature, one of said panels being longer than the second panel to provide a flap projecting beyond the end of the second panel, heat seals joining said panels along the side edges of the bag.

Mechanism and Method for Forming Sleeved Valve Bags, E. E. Burroughs (to St. Regis Paper Co., New York, N.Y.). U.S. 2,643,588, June 30. Apparatus for forming valves having supplemental sheets in flattened gusseted bags having in combination a plurality of pairs of clamp elements for holding a succession of flattened bag tubes in side-by-side relation.

Method of Making Cartons and Carton Blanks, A. J. Weiss (to Robert Gair Co., Inc., New York, N.Y.). U.S. 2,643,598, June 30. The method of forming a carton blank having duplex end flaps which comprises preparing a carton blank having a side-panel portion, at least one end thereof and an extension thereof extending beyond a side panel of the blank, folding said extension over on itself and securing it at its free-edge portion to side-panel portion at a point spaced from the end thereof.

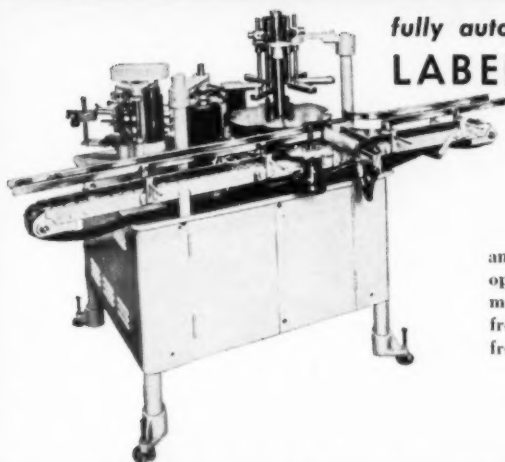
Machine for Assembling Paperboard Partitions, H. Ahlmeyer and W. D. Sherman (to Robert Gair Co., Inc., New York, N.Y.). U.S. 2,643,590, June 30. In a mechanism for assembling criss-cross partitions of paperboard and the like, a continuously moving longitudinal conveyor, a continuously moving transverse conveyor having supports for holding partitions in spaced parallel arrangement, a feeding head adjacent the transverse conveyor for feeding partitions into spaced parallel arrangement in supports, and a transfer member intermittently traversing the transverse conveyor in a direction normal to the direction of travel of the transverse conveyor to transfer the partitions in sets from the transverse conveyor to the longitudinal conveyor.

Method of Producing Cushion in Seams of Containers, D. E. Wobbe (to American Can Co., New York, N.Y.). U.S. 2,643,627, June 30. A method of hermetically sealing double seams formed between flanges of metal container bodies and metal



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U.S. patents digest

covers where the bodies have side seams terminating in lapped sections producing angularly disposed projecting steps in the body flange layers of the double seam adjacent the radially outer layer of the cover flange, said method comprising application of a resilient gasket between said body and cover flanges, interfolding said flanges into a loose double seam with the gasket confined between the two radially outer layers thereof.

Suture Package, S. B. Bradshaw (to Armour & Co., Chicago, Ill.). U.S. 2,643,765, June 30. An easily opened container containing a sterilized surgical suture, comprising a pair of manually twistable disks having inwardly turned annular skirt portions, one of said disks being of a slightly greater diameter than the other.

Article-Sorting Machine, R. E. J. Nordquist (to American Can Co., New York, N.Y.). U.S. 2,643,766, June 30. In a machine for sorting articles of abnormal dimensions from those of normal dimensions, the combination of a rotatable support member for receiving articles to be sorted and means for rotating said support member at a speed sufficient to remove articles by centrifugal force.

Capping Head, J. Muller-Strobel (to The West Co., Inc., Phoenixville, Pa.). U.S. 2,643,805, June 30. In a device for the capping of a container with a closure cap which fits over the top of the container and has a portion to be crimped inwardly to secure it to the container, a plurality of crimping die segments pivotally supported intermediate their ends, each of said segments having a crimping flange at its lower extremity.

Automatic Container-Filling Machine, A. C. Milne (to Central Machine Works, Inc., Philadelphia, Pa.). U.S. 2,643,806, June 30. In an automatic container-filling machine, a rotatable reservoir having a generally cylindrical outer wall and a generally frusto-conical inner wall and an annular bottom wall of relatively small radial dimension providing an annular liquid compartment tapering downwardly in cross-section, said bottom wall having a plurality of circumferentially disturbed openings.

Carton, O. L. Vines (to Alford Cartons, Ridgefield Park, N.J.). U.S. 2,643,813, June 30. A carton blank of substantially rectangular shape provided with two parallel fold lines extending longitudinally the full length of the blank, each of said longitudinal fold lines being disposed substantially the same distance from and parallel to the longitudinal sides of the blank, the blank further provided with a first pair of parallel fold lines.

Paper-Tube Winding Apparatus, J. H. Raymond, Chicago, Ill. U.S. 2,644,376, July 7. A paper-tube winding device, comprising a support having a bore therein opening to opposite sides of the support, an elongated mandrel having a journal at one end projecting into bore from one side of the support to rotatably mount the mandrel on the support.

Bottle, R. A. Blunt, Baltimore, Md. U.S. 2,644,599, July 7. A container for liquids having separable components of different densities, comprising a main compartment substantially symmetrical about a vertical axis and terminating in a substantially circular reduced throat also substantially symmetrical about said vertical axis.

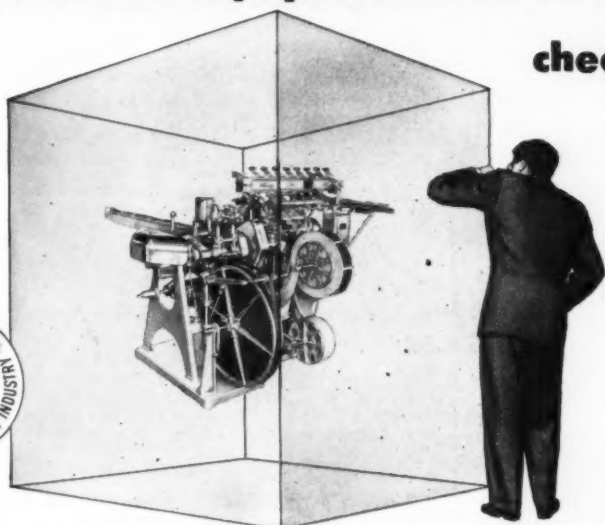
Bottle Carrier, R. Guyer (to Waldorf Paper Products Co., St. Paul, Minn.). U.S. 2,644,624, July 7. A bottle carrier including a generally rectangular frame, a handle connecting opposite ends of frame, a paperboard body connecting opposite sides of frame, said paperboard body including a pair of generally parallel side walls and a bottom panel connected thereto.

Carton-Loading Device, J. F. Curran (to Emhart Mfg. Co., a corporation of Delaware). U.S. 2,644,625, July 7. In a carton-loading machine, a first conveyor, a second conveyor, means for driving said conveyors, said first and second conveyors being relatively disposed to convey merchandise and cartons, respectively, in relative alignment so merchandise may be shifted.

Banding Machine, C. W. Gunter and J. W. Howe (to Wright Machinery Co., Durham, N. C.). U.S. 2,644,628, July 7. In a machine for applying tubular bands to an article, band spreading and holding means comprising a pair of elongated superposed plates, means guiding said plates for longitudinally reciprocation along parallel paths, one of said plates having a notch in one longitudinal edge thereof adjacent to but spaced from one end thereof and having two suction heads.

Disposable Bottle Container, N. A. Petter (to Standard Paper Box Corp., Los Angeles, Calif.). U.S. 2,644,631, July 7. A con-

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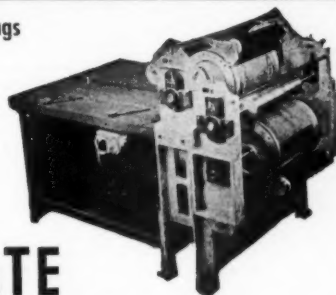
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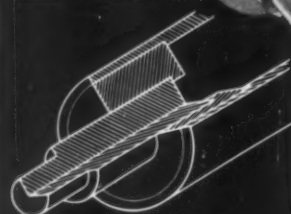
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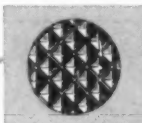
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U. S. patents digest

tainer for packaging a plurality of objects comprising a blank of sheet material cut and creased to form two compartments connected to each other along their inner and upper margins, each such compartment consisting of an inner side wall formed by two partially overlapping sections of said blank.

Box, C. L. Claff (to Norfolk Paper Co., Inc., Randolph, Mass.). U.S. 2,644,632, July 7. A box of cardboard or the like comprising a bottom portion with side wings and end wings integral therewith, end wings having end extensions thereon, side wings having corner lap extensions turned inwardly in their entirety across the box ends with their free ends adjacent one another to form substantially continuous inner end walls at the ends of box.

Method of Producing Paper Bags, W. S. Blizard (to Wolf Bros., Inc., Philadelphia, Pa.). U.S. 2,645,166, July 14. The method of producing bags comprising cutting a strip of material to form a succession of bag blanks and cutting contoured indentations in the edges of the strip in the regions thereof in which the top and bottom corners of each bag will be formed, the indentations each being in the form of a concave surface joining at least one convex surface extending inwardly of the portion of the strip which is to form the finished edge of the bag.

Carton for Baked Goods and Other Easily Broken Products, R. C. Stenger (to Sutherland Paper Co., Kalamazoo, Mich.). U.S. 2,645,337, July 14. A carton and an article enclosed by said carton, article having a generally circular peripheral edge disposed in a plane generally horizontal, carton comprising a bottom, front, rear and side walls, a cover hingedly connected to the rear wall and provided with a tucking flap at its front edge for closing on the inner side of the front wall.

Bagging Machine, T. C. Schenk (to Fruit Products Corp., New York, N. Y.). U.S. 2,645,395, July 14. An automatic bagging machine using a stick holder for suspending stick-held confections, such as stick holder having a longitudinally extending handle operated by lifting up thereon to open such stick holder, said machine comprising means for supporting such stick holder in horizontal position and means for advancing such stick holder along horizontal-supporting means.

Apparatus for Filling Bags, C. W. Spohr (to The Curtiss Candy Co., Chicago, Ill.). U.S. 2,645,396, July 14. The combination of a preliminary conveyor having a succession of article-carrying pins and two receiving conveyors running adjacent to successive portions of the preliminary conveyor and having article-carrying pins on each, a rotating arm device operating in timed relation to the preliminary conveyor for pushing intermittent articles from the pins thereof to pins of receiving conveyors.

Machine for Applying and Sealing Closures to Bottles, J. S. Bozek and H. E. Weidanz (to Standard Packaging Corp., Chicago, Ill.). U.S. 2,645,399, July 14. A machine for applying and sealing closures to bottles comprising a main base housing, housing supporting a motor therein, a vacuum pump driven by said motor and supported within said housing, a rigid conveyor-frame assembly positioned adjacent said housing and a rotatable vertical main drive shaft supported by said housing.

Collapsible Cellular Carton, K. T. Buttery (to Sutherland Paper Co., Kalamazoo, Mich.). U.S. 2,645,402, July 14. A collapsible carton formed of an integral blank and comprising front and rear side walls, bottom members hingedly joined to the lower edges of the side walls with longitudinal partition members hingedly joined to the inner edges of the bottom members and adhesively secured together in side-by-side relation.

Collapsible Covered Container, K. T. Buttery (to Sutherland Paper Co., Kalamazoo, Mich.). U.S. 2,645,404, July 14. A container comprising bottom, front, rear and end walls hingedly connected to the bottom and a cover hingedly connected to the top edge of the rear wall, cover having means for detachable connection to front wall, the front and rear walls having corner flaps hingedly connected thereto.

Collapsible and Re-Usable Carton, I. Dorfman (to Federal Carton Corp., North Bergen, N. J.). U.S. 2,645,405, July 14. A collapsible carton comprising a longitudinally extending bottom panel, longitudinally extending side-wall panels hingedly connected to bottom panel, front end wall comprising front end panels, respectively, hingedly connected to front edges of side panels and a front cover flap, panels respectively hingedly connected to front end panels.

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AUTOMATIC PACKAGER AND PRINTER. Folder describes and illustrates the "Packmaster Model 50" which counts, imprints and packages items in a square, flat, heat-sealed flexible container either singly or in "accordion" foldable strips. Packmasters, Inc. (I-352)

PLASTIC BOXES. Diagramed booklet lists dimensions of 111 high-luster rigid plastic boxes molded from polystyrene and available in a complete range of fast colors including transparent. Bradley Associates. (I-353)

AUTOMATIC PACKING MACHINERY. The complete line of Hesser machinery, including automatic packers for powders and granular flakes, filling and closing machines, weighers, and wrappers, is described in a brochure by Fr. Hesser Maschinenfabrik. (I-354)

SLITTER AND REWINDER. Data sheet discusses the features and technical details of the "Model RWO" precision roll slitting and rewinding machine for plastic film, cellulose foil, and waxed paper. The Clark-Aiken Co. (I-355)

MARKING EQUIPMENT FOR INDUSTRY. Catalog with data on various marking machines, conveyor markers, multiwall bag printer, a corrugated and fiber shipping case printer, and several hand operated printers. Contains chart of available base-lock rubber type and price list. Industrial Marking Equipment Co. (I-356)

CANDY WRAPPER. Data sheet on the "Fogrove 22-B" with hopper feed which wraps candy in a light fantail twist fashion. Adaptable to cellophane, waxed paper, reinforced foil, or plain transparent overwrap. Package Machinery Co. (I-357)

CELLOPHANE. Manual of successful methods of pre-packaging self-service meats in cellophane includes information on its promotional and display advantages and contains data on the techniques and materials used. Canadian Industries, Ltd. (I-358)

PROPER SEALING WITH GUMMED TAPE. Wall chart for shipping room describes storage methods, care of automatic dispensers and proper methods for applying gummed tape to achieve maximum package protection. The Gummed Industries Association. (I-359)

MERCHANDISING WITH CORRUGATED BOXES. A "how to" booklet gives details on the use of corrugated boxes for merchandising products and as selling containers. The Hinde & Dauch Paper Co. (I-360)

BELT CONVEYOR. Folder gives data on Conveyor Specialty's "Unitable," a self-pow-

ered portable belt conveyor for assembly-line inspection and packaging. Conveyor Specialty Co., Inc. (I-361)

BULK PACKING. Pictured and described is Richardson's unique system of bulk packing and weighing food at rates up to 20 tons per hour using the "Bulk-Packer" and "Bulk-Pak Bins." Richardson Scale Co. (I-362)

"STOKESWRAP" AUTOMATIC PACKAGER. Bulletin illustrates the various types of packages that can be formed and filled automatically on "Stokeswrap" machines. Two machine models and several variations are described. Stokes & Smith Co. (I-363)

FLOCK. Booklet discusses the manufacture of flock made of various fiber materials, application methods used, and suitable adhesives. Application equipment made by various manufacturers are also covered. Claremont Waste Mfg. Co. (I-364)

WRAPPING AND BUNDLING. Methods of operation of a dual purpose rotary bundling machine which wraps and seals groups of cartoned commodities automatically in any type of coated paper, heat sealing cellulose film, or glassine. Ayers & Grimshaw, Ltd. (I-365)

NAILED-WOOD BOXES. Informative outline covers procedure for ordering nailed-wood boxes for shipping, and contains illustrations of styles and nailing patterns, lists of wood groups, nail charts, and a glossary of useful "box terms." The American Box Co. (I-366)

COLLAPSIBLE TUBES. Booklet covers the manufacture, sizes and styles, decorating, coating, filling, and shipping of collapsi-

ble tubes with special emphasis on the "Sheffield Process" to achieve a maximum of pliable toughness. The Sheffield Tube Corp. (I-367)

AUTOMATIC CARTON BLANK STRIPPER. Details on the operation of a device for use with the Miehle Cutter and Creaser which automatically strips front, side, and tail trim, and internal scrap from die cut carton blanks. Miehle Printing Press & Mfg. Co. (I-368)

CARTON STAPLING MACHINES. The complete line of International carton-stapling machines, from hand-operated units to multi-head production models for stapling corrugated or fiber cartons, is described and illustrated in this brochure. Prices included. International Staple & Machine Co. (I-369)

DRUM LINERS. Portfolio discusses physical properties and contains miniature samples of "See-Safe" polyethylene circular bottom and flat drum liners for use in a new method of bulk packaging liquid, semi-liquid, or solid products. Mehl Mfg. Co. (I-370)

REINFORCED WATERPROOF PAPER. Folder describes "Glass-Wrap" waterproof paper reinforced with non-deteriorating glass fibers which resist tear from all directions and which has parallel reinforced edges. Meets JAN-P-125 (E-1, E-2, E-3). Angier Corp. (I-371)

"ALCOWAX." Description of the chemical and physical properties of "Alcowax," a low-molecular weight material which is resistant to water and chemicals and may be used for coatings for paper and containers. Semet-Solvay, Div. Allied Chemical & Dye Corp. (I-372)

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"CELLUSUEDE" FLOCK. Bulletin includes a description of decorative "Cellusuede" flock fiber and its uses, plus data on adhesive selection and methods of application. Also contains schematic drawings and reference chart of physical properties. Cellusuede Products, Inc. (I-373)

MULTI-WALL SHIPPING SACK. Description of "KRAFT-lok" valve-type gusseted bags for packaging free-flowing granular or pulverized materials, in which an integral sleeve replaces standard inserts and sleeves for cleaner filling and tighter closures. Kraft Bag Corp. (I-374)

BEMIS "QUANTACOLOR" BAGS. Booklet explains the "Quantacolor" method for selecting the most suitable combination of colors for a package, and its relationship to Bemis service. Bemis Bro. Bag Co. (I-375)

GLUING AND COATING. Specification catalog of Potdevin gluing, cementing, coating, and laminating machines including types for hot and cold glues, latex, varnishes, lacquers, resins, and thermoplastics. Potdevin Machine Co. (I-376)

MEAD COATED PAPERS. Portfolio contains samples of the complete range of Mead coated papers with examples of black and white and four color line and half-tone printing on nine different varieties. Mead Sales Co. (I-377)

FACTS ON CELLOPHANE. Leaflet describes the history, manufacture, and packaging functions of cellophane film. Explains the various types and weights made for each segment of the flexible packaging industry. Sylvania Div., American Viscose Corp. (I-378)

CORRUGATIONS. House organ outlines procedure one manufacturer followed to solve his packaging problem by the use of corrugated cartons. Interesting information on the manufacture of paperboard also included. Stone Container Corp. (I-379)

BAG MAKING MACHINES. Folder illustrates and describes Roto Bag machines for making flat, gusseted, and square single-wall and duplex bags from polyethylene, pliofilm, cellophane, and other sheet or tube materials. Roto Bag Machine Corp. (I-380)

PHOTOGRAPHIC PREPARATION OF SILK SCREENS. Two bulletins explain how to use Kodak "Ektagraph" film for rapid preparation of silk screen printing screens from line or continuous tone copy. Eastman-Kodak Co. (I-381)

PRE-PACKAGING PRODUCE IN POLYETHYLENE BAGS. Booklet explains the importance of ventilation in produce packaging, recommends bag sizes for various fruits and vegetables, and gives procedure for proper refrigeration. Durethane Corp. (I-382)

"PLASTICS PACKAGER." Second edition of Monsanto's booklet for packagers contains information on styrene containers and dishware, and packets fabricated in one piece of "Vuepak" rigid acetate film. Monsanto Chemical Co. (I-383)

LABEL CUTTER. Brochure discusses the "Strong" semi-automatic label cutter designed to die cut labels and similar products directly from plain or printed sheets. Hobbs Mfg. Co. (I-384)

RESINPROOF COATING FOR GLUE POTS. Leaflet describes a clear solvent dispersion for use in applying an anti-adhesive coating to glue pots and other machine parts. Federal Adhesives Corp. (I-385)

PRIVATE LABEL AEROSOL PAINTS. Details on a custom service which supplies touch-up paints, lacquers, and enamels, matched to specific colors, in aerosol containers bearing any given company name. Sprayon Products, Inc. (I-386)

WASHER AND RINSER. A layout and specification table of the "Loadamatic" automatic washer and rinser for glassware having rounded bases is contained in a folder issued by U. S. Bottler Machinery Co. (I-387)

LABELER AND IMPRINTER. The portable power-driven "Thermo-Print-Labeler" which cuts, imprints, and applies labels from economical roll stock is discussed in a brochure released by National Bread Wrapping Machine Co. (I-388)

COLORLED FOIL. Swatch booklet contains samples of twenty-three plain and embossed varieties of colored foil produced by Floyd A. Holes Co. (I-389)

STRETCHABLE PROTECTIVE PACKAGING MATERIALS. Brochure describes a wide range of packaging uses for two Kraft products—"Corrucrepe," creped and corrugated for stretch in every direction, and "Elastikraft" deep-crinkle creped for flexible utility protection. May be used as interleaving, cushioning, barrel liners, etc. Cincinnati Industries, Inc. (I-390)

UNSCRAMBLER. Catalog diagrams the eight stages of the unscrambling cycle used by the "Walkie-Pushie," a high speed unscrambler for odd shaped containers. Island Equipment Corp. (I-391)

HIGH-SPEED HEAT SEALING MACHINE. Bulletin on the advantages and operation of the "Comet" Model 7 semi-automatic heat sealing machine for sealing bags made of cellophane, plastic films and light-weight barrier materials. Globe Heat-Seal, Inc. (I-392)

LABEL DISPENSER. Specification sheet gives details on the "Eze-Stik" automatic label dispenser for self-adhesive-backed labels. Simon Adhesive Products Corp. (I-393)

CELLOPHANE WRAPPING MACHINE. Folder describes a high-speed cellophane wrapping machine with electric eye registration, which is particularly well adapted for wrapping display cartons containing tomatoes and other perishable fruits and vegetables. Hayssen Mfg. Co. (I-394)

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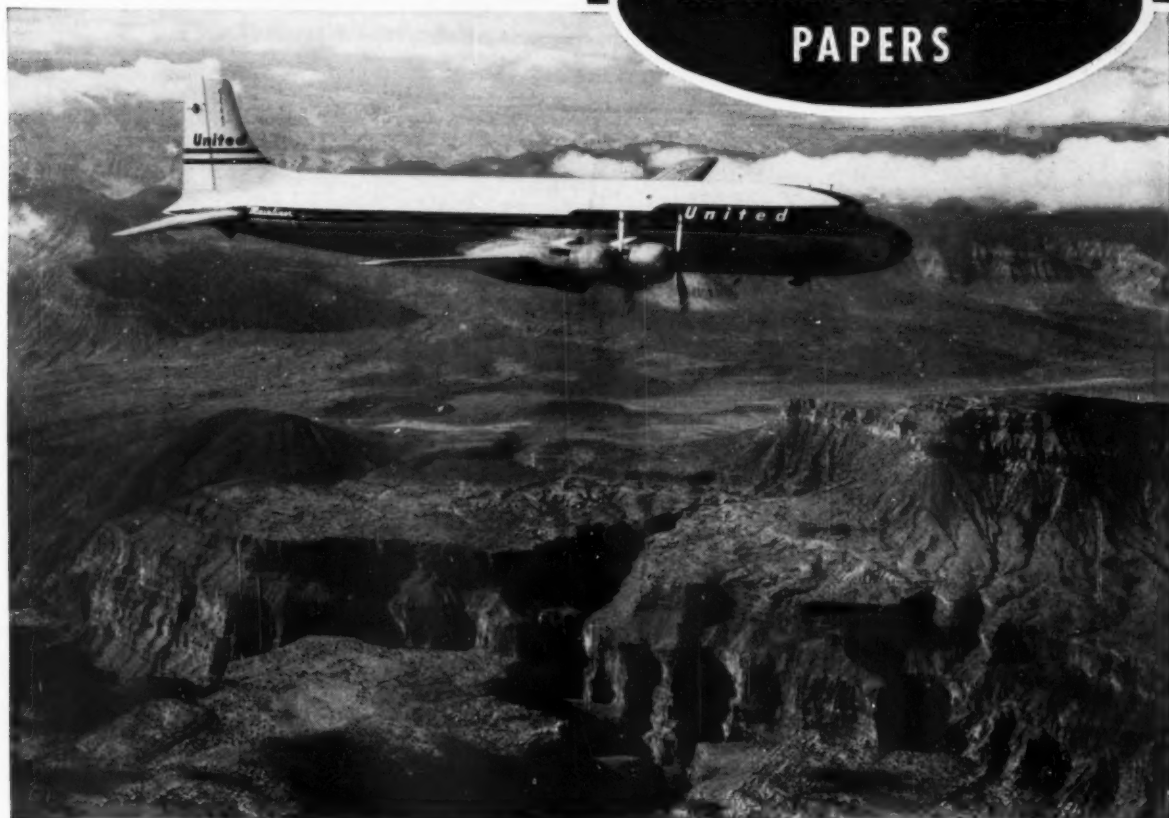
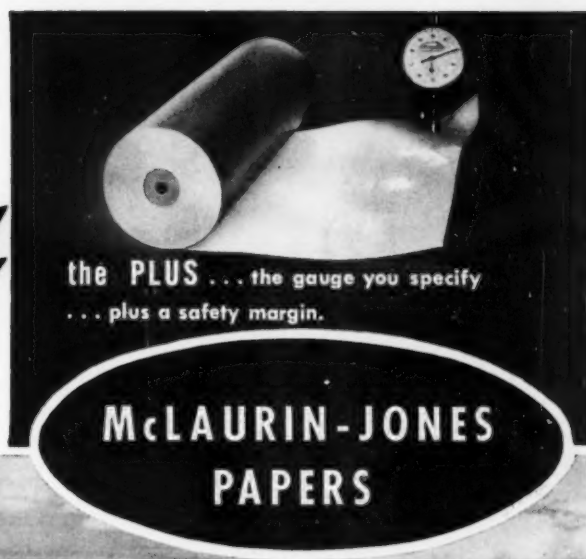
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You get both with new M-J *Protection-Plus* Polyethylene Coated Paper.

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Put M-J *Protection-Plus* Polyethylene Coated Papers to work saving dollars for you. Write for information and samples today.

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McLAURIN-JONES PAPERS

SEPTEMBER 1953

195



The SEALTITE SYNCHROMATIC

Produces a **BETTER PACKAGE**
from a Standard Paper
Bag at Big Savings

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CONSOLIDATED PACKAGING MACHINERY CORP.
BUFFALO 13, N.Y.

Built for dependable service

New . . . fully automatic POTDEVIN-CORLISS LABELER & CODER

for vials and ampules



Labels and codes
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LET US **SOLVE** YOUR
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A correction and variable speed trans-
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AEROSOL VALVES AND DISPENSING UNITS

DEVELOPED FOR THE ARMED FORCES

... NOW AVAILABLE TO YOU
EITHER "OPEN" OR "SEALED"

Everywhere, fillers of self-dispensing pressurized products are switching to the sensational new Dill Aerosol Valves and Dispensing Units with these outstanding features—

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Check these valuable merchandising and money-saving production advantages for your product. Write for full engineering details and test samples, now.

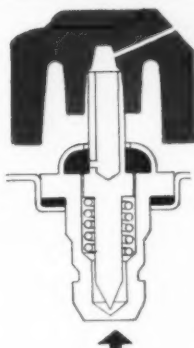
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THE DILL AEROSOL VALVE

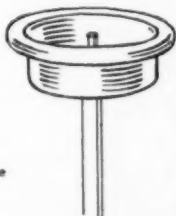
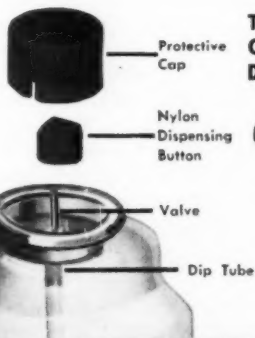
A Safety-Seal, Precise-Action Valve that produces a finer molecular and uniform spray with no after leak or drip. Available in 2 styles—*Ready to Use* or with *Non-Pierced* valve opening.

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A PRODUCT OF 44 YEARS
EXPERIENCE IN THE DESIGN
AND MANUFACTURE OF
SAFETY SEAL VALVES

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BY THE MAKERS OF
REDCORE
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FOR WRAPPING FOR COVERING FOR CAR LINING



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ceramic printing · silk screening

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Mobile research lab

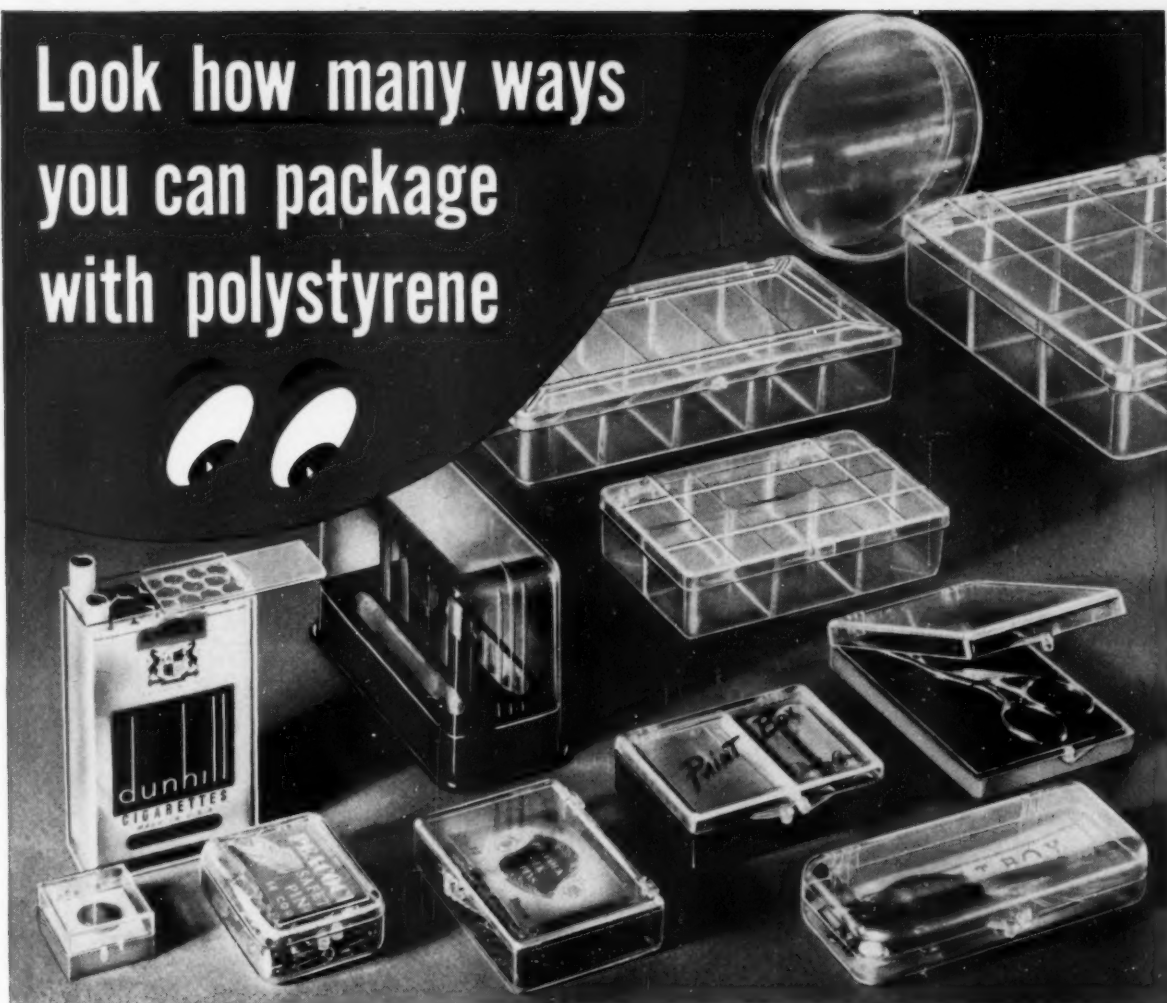
A new mobile frozen-food research unit has been created by Continental Can Co., New York, which literally takes the company's research directly



to the frozen-food processor. Designed to give packers in-plant research assistance in producing highest quality products by the most economical methods, this unique "suitcase laboratory" includes four machines and a two-man operating team. It can be set up in an area only 6 by 8 ft., yet it carries out in miniature all the basic operations of a full-sized plant, according to Continental. Included in the unit are a recording potentiometer, an atmospheric closing machine, a gas and vacuum closing machine and a freezing unit—all ready for on-the-spot technical work. With these machines, the research team seals test cans atmospherically with inert gas or by vacuum; attaches thermocouples to the cans for interior temperature readings; freezes test products at temperatures between zero and minus 35 deg. F. by either blast or immersion, and collects research data on automatic strip charts. By analyzing this information the research men determine optimum temperature and time for freezing, size and shape of container most effective, whether precooking or blanching improves product quality and whether air closure, vacuum or gas packing is best for the specific product.

So far, the mobile unit has tested seafood on Maryland's Eastern Shore and peas, blueberries, raspberries, blackberries and green beans in the Syracuse area. Between trips the unit is used for running tests in Continental's Chicago research laboratories. Although its career has been brief, Continental sees it headed for an important place in the frozen-food picture as a troubleshooter for present problems, as a watchdog over future situations and as a creator of technical advances in its own right.

Look how many ways you can package with polystyrene



FIRST, crystal clear polystyrene allows your product to be seen and examined, yet protects it from damage by handling.

Where your product permits, the base of the package can be molded to form an appropriate stand or setting, thus lifting your product away from its background to catch the eye of a potential buyer more quickly.

When the magic of color is added to the base, the sales appeal of your product in a polystyrene package is even more powerful.

Packages made of Koppers Polystyrene are strong and sturdy, will not deteriorate with time, and offer the consumer a permanent container, either for your product or for other articles. The dimensional stability of Koppers Polystyrene assures a

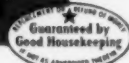
close fit of related parts, and permits use of either metal or plastic hinges. Molding with Koppers Polystyrene is fast, easy and inexpensive . . . resulting in a low unit cost per package.

Koppers has many types of polystyrene that are suitable for packaging applications. Write to us today for specific information about the polystyrene that will add maximum sales appeal to your product!



Koppers Plastics Make Many Products Better and Many Better Products Possible.

Koppers Plastics



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SERVING INDUSTRY...SERVING AMERICA

You are always close to Continental Can with its 74 plants in the United States, Canada and Cuba, 17 field research laboratories and 66 sales offices.

SALESMEN WITH NINE LIVES

Most containers are meant to have a short life and a useful one. But the pails and drums that Continental makes of *steel* are just too good to throw away. They literally have nine lives.

In their first life they transport heavy products like paint, roofing or petroleum compounds, chemicals or bulk drugs. They go to market bright, tight and beaming sales appeal.

After their contents are gone, they continue working for years in shops, garages and on the farm. Their labels, lithographed right on the metal sides, remain sharp and clear. The man who uses an empty container for the storage of feed, seed, kerosene or what-have-you is constantly reminded of the brand that came to him in that container.

Continental supplies these "salesmen with nine lives" to an impressive list of leading companies. We are a leading producer of two to 12-gallon flaring and straight-sided steel pails and closed-head drums.

Also important is the fact that Continental is one of the few steel container manufacturers that also make tin cans. This means we can offer our customers an experience in manufacturing and lithographing metal containers that's hard to equal.

CONTINENTAL © CAN COMPANY

CONTINENTAL CAN BUILDING

100 E. 42nd ST., NEW YORK 17, N. Y.

CONTINENTAL CAN COMPANY OF CANADA LIMITED, MONTREAL



TIN CANS



FIVE DRUMS



PAPER CONTAINERS



CAP AND CORK



STEEL PAILS AND DRUMS



BAGS



BEVERAGE

**FOR QUALITY PRINTING
ON HARD-TO-PRINT SURFACES**

THE HHH JET

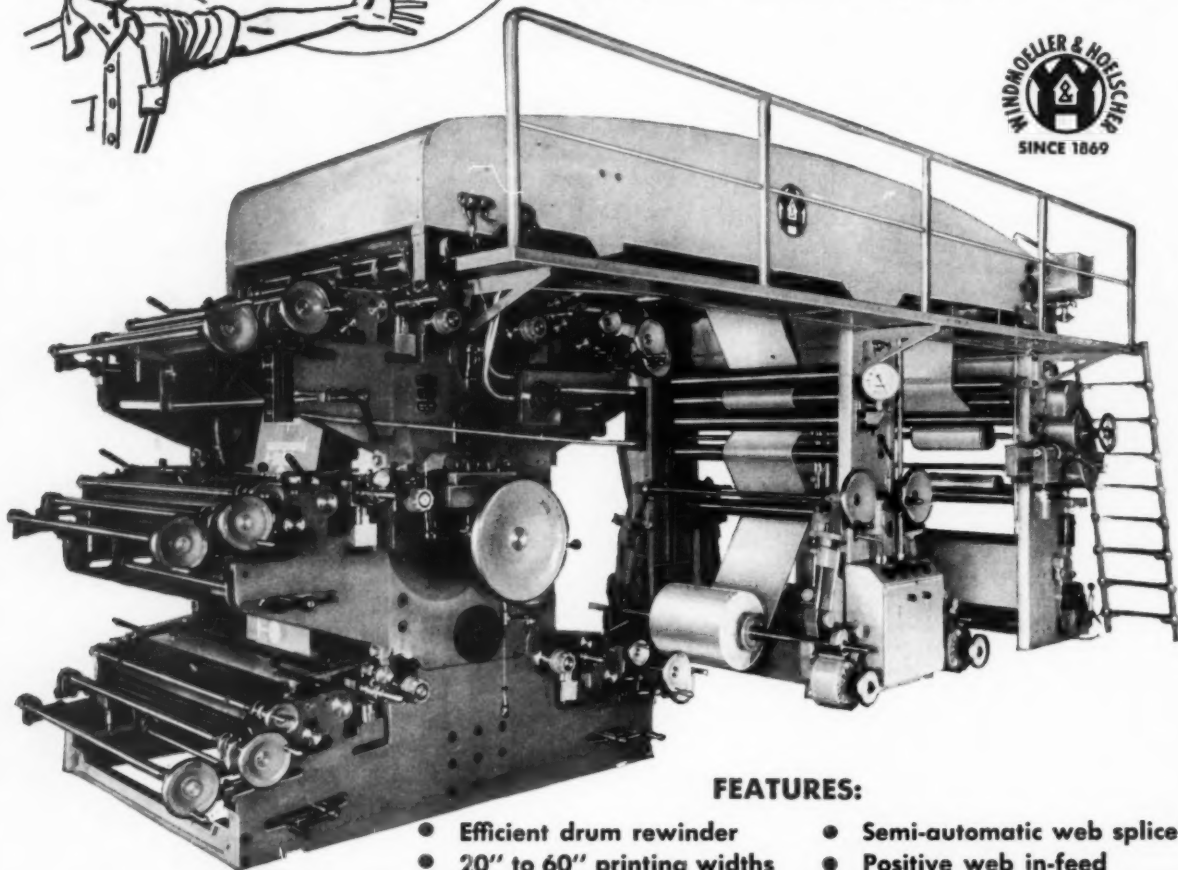
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JOB!**



Printers of flexible packaging can depend on the HHH Jet for top-quality flexographic (aniline) printing even when working with "problem materials".

They're assured of clear, legible fine-type matter as well as unmottled impressions on large solids on all types of wrappers, light and heavy materials. The HHH Jet provides, and *holds*, hairline register—even during high-speed operation—when printing on such "hard-to-print" surfaces as cellophane, glassine, aluminum foil, pliofilm, polyethylene.

The HHH Jet prints in up to six colors. It offers long drying distances between colors, semi-automatic web splice, simplified two-side printing, web tension control, one-side parallel adjustment of all inking rollers, ANILOX transfer cylinders, etc., etc. Built-in precision assures years of dependable, economical service.



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H&R INDUSTRIES
NAZARETH, PENNA. *Extruded
Plastics*

Shulton's Old Spice

(This article continued from page 107) advertisers in the country and is also a consistent user of such mass publications as *Saturday Evening Post* and *Life*, as well as class magazines. The company is a large purchaser of spot radio in major markets, using as its signature a rousing sea chantey that appropriately ties in with the sailing ships pictured on its packages. The nautical theme is also an important part of the company's television advertising.

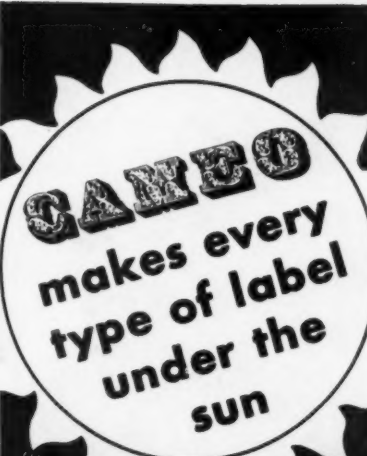
An indication of Shulton's packaging sense is the fact that space advertising has never failed to feature the packages. The basic Americana appeal of the containers and boxes, with such slogans as "Add Spice to Your Life," is used to carry the product year after year.

Shulton attributes a prominent part in its achievement of leadership in the field of men's toiletries to its Father's Day promotions, which it has pushed since 1939 with such effectiveness that Father's Day has become a second Christmas for Old Spice. The acceptance of this activity by stores has reached a point where Old Spice is being featured in as many as 5,000 windows for Father's Day. Much enthusiasm for the activity was built up by window-display contests conducted through World War II with War Bonds being awarded for prizes.

More than 90% of Old Spice products are sold directly to retailers through the company's own sales force. Direct retail outlets now number many thousands, with more stores covered through jobbers.

The Shulton record would not be complete without a word about the company's contribution to World War II effort when many of the company's manufacturing facilities were turned over to the making of precision parts for military aircraft.

The Shulton business is a family affair, the name actually being derived from a contraction of the founder's name, "Schultz," and "son." All shares are privately held. Even though the business has expanded to world-wide proportions (the company now sells in 28 foreign countries), there is a feeling of family friendliness in the beautiful plant in Clifton where workers still appear to take a definite pride in producing packages that are akin to the craftsmanship of the early



CAMEO
makes every
type of label
under the
sun

heat seal

gummed

pressure
sensitive


thermoplastic

paper

die cut

foil

embossed



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DIE AND LABEL COMPANY
154 WEST 140th STREET, NEW YORK, N. Y.
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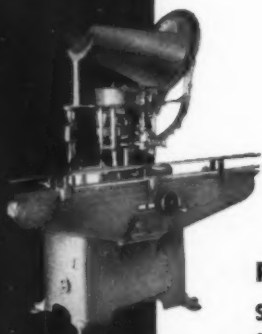
Seal
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RESINA CAPPERS

A MODEL FOR EVERY PURPOSE . . .

A SPEED FOR EVERY NEED!

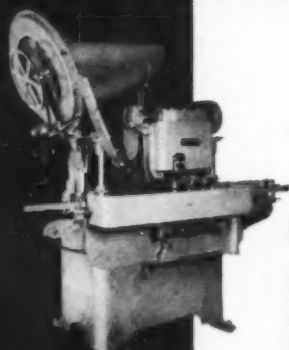
Capacity up
to 60 per
minute.



RESINA

Standard, single head,
automatic screw capper.

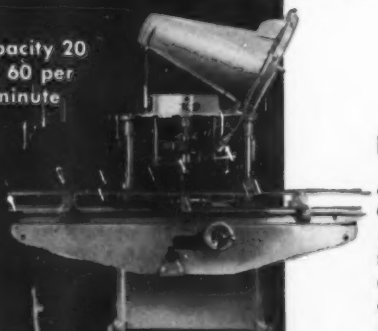
Flexible
Fast
Fully
Automatic



RESINA

High speed, straight line
screw capper. Rated for
speeds up to 300 per
minute depending on
size of container.

Capacity 20
to 60 per
minute



RESINA

Automatic innerseal ma-
chine for selecting and
applying standard inner-
seals to various types
and sizes of tin cans as
commonly used in the oil
industry.

Other models available.
Write for descriptive
literature.

Agents in principal cities through-
out the United States and Canada

RESINA AUTOMATIC MACHINERY CO., INC.

BROOKLYN 31, N. Y.

American hand-craft from which they are derived.

On such packaging concepts an international business worth millions of dollars has been built in the short space of 16 years.

CREDITS (Principal suppliers for current Old Spice for Men packages): Bottles and shaving mugs, T. C. Wheaton Co., Millville, N. J. Folding cartons, Lord Baltimore Press, 1601 Edison Hwy., Baltimore 13, Md., and Empire Box Corp., 70 Outwater Lane, Garfield, N. J. Collapsible tubes, Sun Tube Corp., 181 Long Ace., Hillside 5, N. J., and White Metal Mfg. Co., 1012 Grand St., Hoboken, N. J. Aluminum foil for wrapping shave stick and deodorant stick, H. D. Catty Corp., 160 Varick St., New York 13. Urea closure for deodorant container, Armstrong Cork Co., Liberty St., Lancaster, Pa. Box covering paper, Thomas N. Fairbanks Co., Inc., 1 E. 44 St., New York, printed by James N. Johnston, Inc., 209 W. 38 St., New York. Lithographed aerosol can, Crown Can Co., Erie Ave. and H St., Philadelphia. "Smooth Shave" aerosol spout and pintle, Pyro Plastic Co., Pyro Park, Union, N. J. Machinery: Aerosol metal valve and pressure filler, Oil Equipment Laboratories, Inc., Bridge St., Elizabeth, N. J. Liquid fillers, U. S. Bottlers Machinery Co., 4017 N. Rockwell St., Chicago 18. Vacuum powder filler, Pneumatic Scale Corp., Ltd., 65 Newport Ave., Quincy 71, Mass. Augur powder filler, New Jersey Machine Corp., 16 & Willow Ave., Hoboken, N. J. Collapsible-tube filler, Aresco Machine Co., Inc., 25 W. 43 St., New York 36. Automatic carton for shave lotion, F. B. Redington Co., 112 S. Sangamon St., Chicago. Semi-automatic carton for collapsible tubes (Tuck-O-Mat), Machinery Mfg. Co., Inc., 2431 Dallas St., Los Angeles 31. Tape and tape sealer for shaving-mug cover, Minnesota Mining & Mfg. Co., 900 Fauquier Ave., St. Paul, Minn.

H & D merges

Combination of West Virginia Pulp & Paper Co. and The Hinde & Dauch Paper Co. has been recommended by the boards of directors of the two companies. The action is subject to stockholder acceptance. Hinde & Dauch, which manufactures corrugated shipping containers and part of its paperboard requirements, is to be operated as a subsidiary of West Virginia Pulp & Paper Co., manufacturer of paper and paperboard. Operations, personnel and customer relationships of the two companies will continue as they are at present. Hinde & Dauch will continue to maintain central offices in Sandusky, Ohio.



**New show-window package
attracts bigger crowd of buyers!**

Because product visibility is of vital importance in the sale of self-service items, a window carton which lets consumers see the rich, appetizing color and texture of the product itself is big news in the ice cream industry.

Now, after more than two years of experimental research, a pint carton with a large window of Sylvania Cellophane has been developed which permits mechanical filling on standard high speed packaging machines.

First to use this ingenious new window package was Richman Ice Cream Company. In advance market tests, the new carton outsold Richman's former opaque carton by *two to one!*

The moistureproof quality of the 300 MSB Sylvania

Cellophane used for the die-cut panel prevents any shrinkage due to dehydration, and the extreme toughness of the cellophane window enables the package to retain its attractive appearance during storage and display. There is no difficulty due to frosting.

Packaging costs, including three-color printing, are about equal to an opaque carton containing a five-color reproduction of the contents.

If you would like help in developing a faster-selling package for your product, talk with your Sylvania representative, or write our Market Development Department, Sylvania Division, American Viscose Corporation, 1617 Pennsylvania Blvd., Philadelphia 3, Pa.

SYLVANIA CELLOPHANE

SYLVANIA DIVISION, AMERICAN VISCOSE CORPORATION



"We Prefer Packages with Pouring Spouts"



**So say the home-makers
you want to sell**



... and why not? Packages of free-flowing products should pour easily—without spillage—without waste. Put—

* SEAL-SPOUTS

on your packages right in the production line—and you'll gain new friends.

Not only will packages with SEAL-SPOUTS be "easier to pour, they will be—



EASIER TO OPEN
without knives and risk
of cut fingers

EASIER TO CLOSE
A slight finger pressure
closes the spout



EASIER TO STORE



Take advantage of this consumer preference. Add

SEAL-SPOUTS "They're Aluminum"

T. M. Reg. U. S. Pat. Off.



SEAL SPOUT Corp.

363 Jelliff Ave., Newark 8, N. J.

Unit packaging

(This article continued from page 94)
about 25% of what it would cost to put the same amount of product in bottles. The package would permit the sale of a complete hair treatment for an estimated 10 cents and at the same time act as a profitable sampling program for larger economy packages.

New convenience features

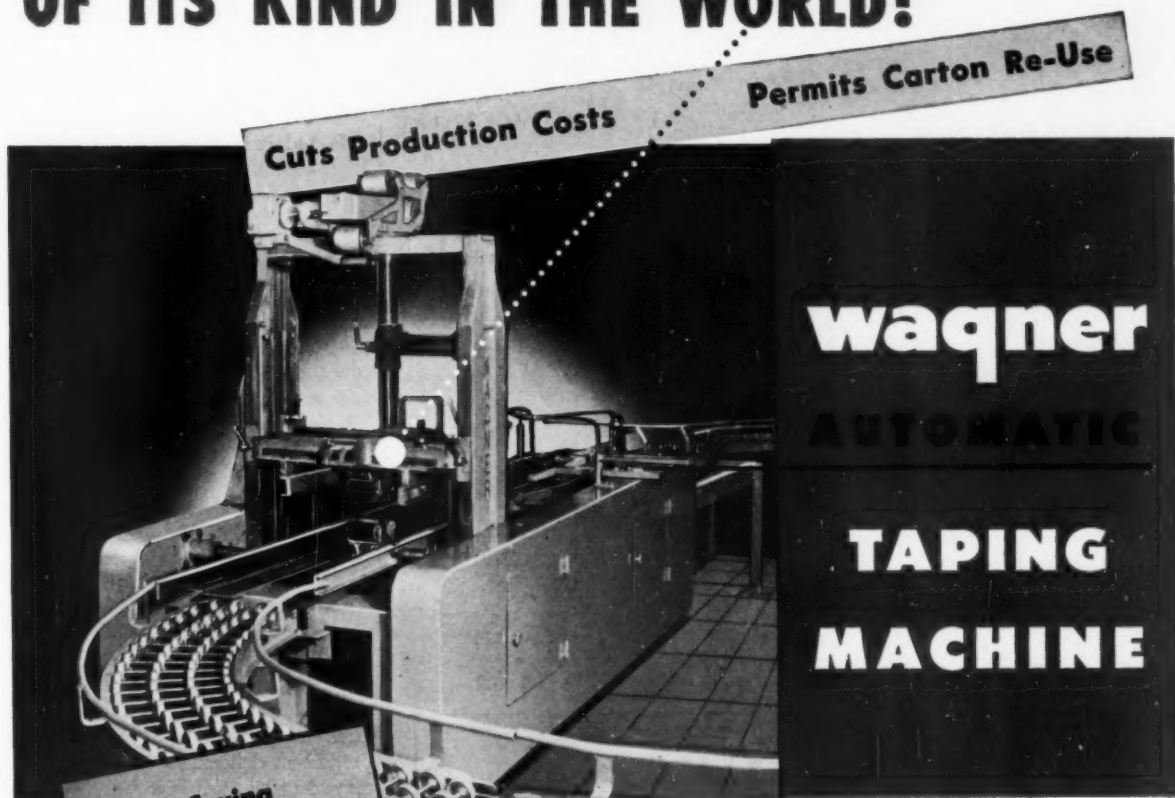
More recently, machine engineering has been concentrating on still other ways to make unit packages easier for consumers to use.

The results are exemplified by the easily opened paper pouch used for a single-cup serving of Continental Coffee Co.'s hot chocolate. The trick was to have a good, strong seal and at the same time a package that's easy to open. The paper is the super-calendered, heat-sealable type.

Continental uses a machine which seals away from the filling area thereby avoiding dusted sealing edges. A wax strip is applied across the back of the envelope and the package is then filled. After filling, the extra-long top flap is folded over and the wax is pressure sealed. Then, as a safeguard, a narrow heat seal is applied along each side edge of the flap, extending down about 1/2 in. from the top. The result is a seal which is siftproof and safe for shipment, but the envelope can be readily opened when desired just by pulling the free edge of the flap to break the pressure seal. The long flap comes free and is used for shaking the package to remove all of the product.

Another type of machine provides for a pull-tab opening device on the 1 1/16-oz., one-cup package of Nestle's sweet milk cocoa, which uses the same type of heat-seal paper as Continental's. In the die cutting, flaps are provided on both sides of the envelope opening, one about 3/16 in. longer than the other, and formed in a narrow, tongue-like shape in the center of the opening. In sealing, the flaps are folded over together with the long narrow one underneath. Since the narrow flap does not seal to the body of the envelope, but only lightly to the underside of the top flap, it provides a free tab for pulling. On pulling, the lightly heat-sealed areas break away easily, giving a wide-open package with two

THE ONLY CARTON CLOSING MACHINE OF ITS KIND IN THE WORLD!



Time Saving Profit Making DESIGN FEATURES

- Saves Labor. Operates automatically without special supervision.
- Saves Space. Compact — requires minimum of floor space.
- Saves Time. Adjustable to variable speeds to fit your packing line.
- Saves Accidents and Downtime. Moving parts fully guarded, yet easy to reach for maintenance.

Now you can automatically tape cartons neater, faster and at far less cost. For the compact, efficient Wagner Automatic Taping Machine can be tuned to your production line to tape up to 50 cartons a minute.

Through Automatic Taping — you eliminate supervision, and slash carton-sealing labor costs. Your taping job is done simply and quickly . . . neatly. A neater package means greater carton acceptance, thus increasing carton return trips and drastically cutting single trip carton costs. It's these extra savings that add up to sound plant economy. Investigate the new Wagner method of carton sealing. Write Wagner today!



WAGNER Automatic
Taping Machine
is used by
leading breweries
everywhere

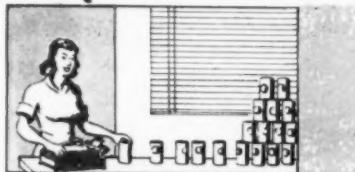


FREE

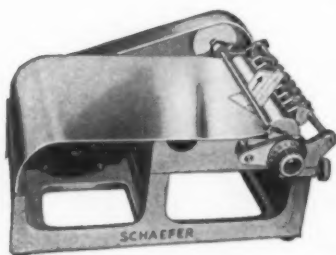
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1905 S. 1st Street, Milwaukee, Wisconsin
Please send me bulletin 167 describing the
WAGNER AUTOMATIC TAPING MACHINE.

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Company _____
Address _____
City _____ State _____

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**FOR BOXES • BOTTLES
CANS • PACKAGES**

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A Service of **MODERN PACKAGING**
A Breskin Publication
575 Madison Avenue New York 22, N. Y.

flaps to hold onto for emptying. This machine is supplied with a device to flatten the bag and then rack it up into position so operators can grasp several at a time for carton packing.

Two important, automatically applied convenience features are part of the new Burroughs Wellcome & Co. sample package of Methedrine brand methamphetamine hydrochloride and Perazil brand chlorcyclizene hydrochloride. A Pliofilm strip of 50 pills, dispensed through a die-cut slot in a folding carton, is supplied to physicians as a sample. Between each unit of the strip is the faintest perforation, requiring what is called a "feather-light tear" to separate one unit from the other. To facilitate opening the individual units, small tear notches in arrow-head shape are provided as unsealed areas in the opposite upper corners of the two side fin seals. When torn at either notch, the cellophane tends to tear down along the end fin, leaving the pill safe but accessible in the opened center pocket.

Customarily, on most unit packages the user tears through the sealed edge into the center area containing the product. In effect, the film is completely torn away from the product. An unsteady user may crush a product of delicate composition or he may drop it. The Burroughs Wellcome idea avoids this.

The principle of dispensing strip-packaged products from a slotted carton has been a convenience feature used for some time in the pharmaceutical industry for large counter or clinical dispenser units. However, the new Burroughs Wellcome dispenser is being used in a more unusual way—as a physician's specimen package. The small folding carton, 2½ by 2½ by 1½ in., is attractive and handy for the physician to use in his office or to carry in his medical bag.

Advantages in sampling

By this time Lever Bros. Co. has completed a large national sampling campaign with the assistance of a twin-unit or tandem package which is simply two units left connected from the production strip. A total of over 18 million tandem packages of Surf all-purpose powdered detergent were mailed in chipboard cartons to homes throughout the country. To withstand the mail handling, the packets were made up of bleached

kraft paper super-calendered for strength and coated with 10-lb. polyethylene. By delivering the product right where it will be used—in the home—and by enclosing a coupon worth 10 cents towards the purchase of a large or economy package, Lever Bros. stimulated a tremendous amount of new interest in this highly competitive product.

Refinements in unit-packaging techniques, the availability of reliable materials and the combined resources of two different contract packagers turned this mammoth sampling campaign into a merchandising fact.

The Lever Bros. story is just one of the many instances in which a manufacturer has found a valuable sampling device in the unit pack. Manufacturers are putting up unit samples of lotions, powders, salt, water softeners, tooth paste, baby cereals, medicines, shaving soaps and countless other items to introduce new products and build extra sales for older and more established brands.

The drug industry is by far the biggest user of unit packaging for sampling. Sampling to physicians has always been big here, an accepted part of a coordinated merchandising plan. The unit or strip package—often in connection with a dispensing carton—delivers the product clean, protected, unbroken and easy to use in an ethical, non-trademarked manner.

Ciba, which uses most of the techniques mentioned, has come out with a new one for its Pyribenzamine hydrochloride tablets. The pouch section of the unit pack is joined by a perforation to a label of exactly the same size. Printed on both sides, the label lists the product, dosage, information required by Federal law and a brief sales message. When ready to give the sample to a patient, the physician simply tears the label off.

Striving to implant brand identification on consumers, manufacturers frequently have their unit sample packs printed to look as much like the regular retail package as possible. Techniques in printing flexible materials can create packages which reproduce design and color of the retail units down to the finest detail.

So beguiling have some samples been that they actually become merchandisable packages in their own

Sterling Supreme

gummed tape cuts

Shipping Costs

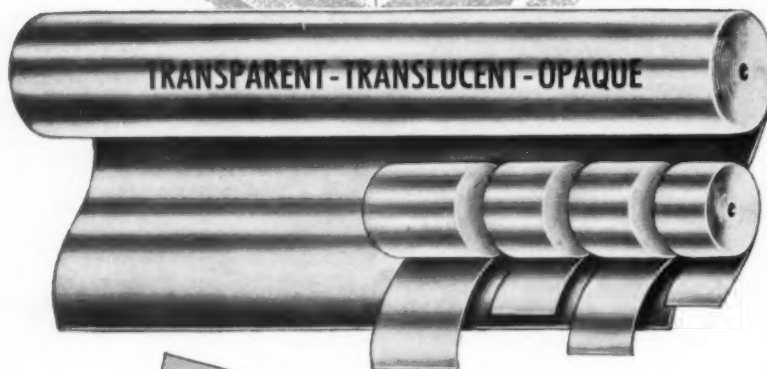


THE GUMMED PRODUCTS COMPANY

HEAD OFFICE—Sales Offices in principal cities

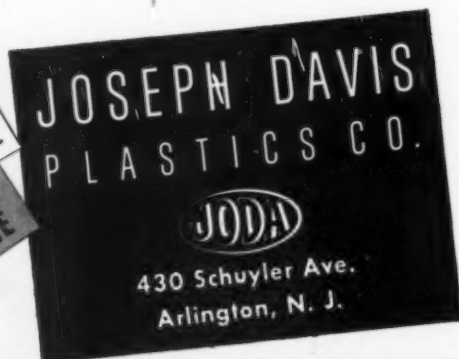
The Gummed Products family... Sterling Supreme Gummed Tape, Scotch Imperial Gummed Tape, Leash Tape, Cell Tape, Fire-Safe (Bonding) Tape, Gummed Printing Papers, Gummed Cell and Papers, Box Tapes and many other specialty products.

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SHEETS
CUT TO SIZE
CONTINUOUS ROLLS
SLIT TO SIZE

ADAPTABLE FOR DEEP DRAWING
and all other types of forming,
printing, and laminating.



right.² Armour Laboratories samples three one-grain unit packs of Crystar aspirin to physicians in a mailer and in its regular sales carton includes 24 of the same packets. Thus recognition for this non-prescription product is carried through from the sample to the retail package and, through the unit package, the company can supply the product in a powdered form in one-grain units, which helps prevent an overdose, since aspirin is generally given to children in doses of one grain for each year up to five years.

Armour's experience is one more indication that the unit-of-use package—once merely a novelty and a sampling gadget—has become a definite part of the packaging pattern in regular merchandising channels. In many cases it may prove to be the best of all packaging alternatives. Now almost unlimited in the types of product it can handle, it deserves consideration in any selection of package forms.

² See "Sampling Ideas," MODERN PACKAGING, July, 1950, p. 142.

Marking standards

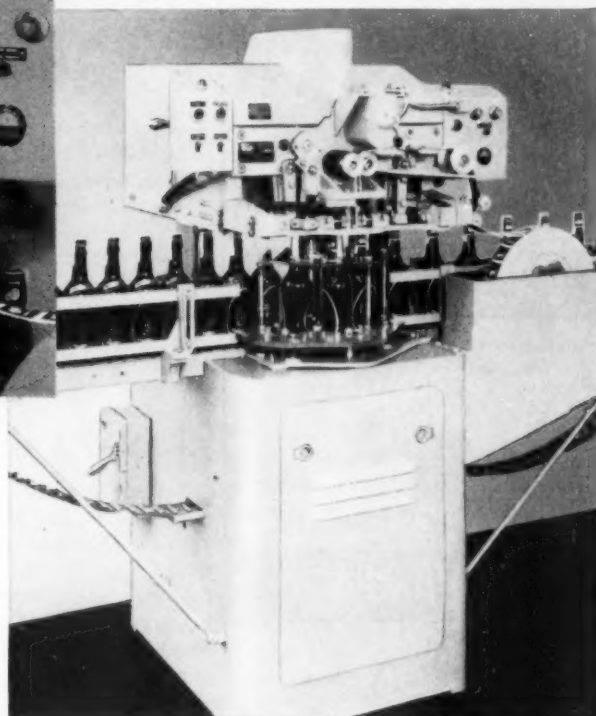
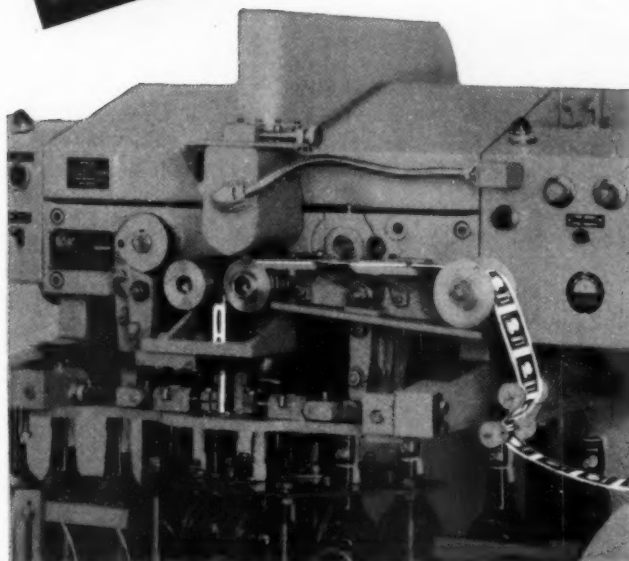
The recent Thirty-Eighth National Conference on Weights and Measures, sponsored by the National Bureau of Standards in Washington, officially adopted a new Model Regulation on Package Marking Requirements, which it hopes will be uniformly adopted by all state authorities.

The model regulation, covering weight and measure and other mandatory information customarily found on labels of packaged products, is virtually identical with similar regulations enforced on a national scale by the Federal Food & Drug Administration. Since the FDA covers only foods, drugs and cosmetics, the effect of the new proposed state regulations is to extend the same rules to all other packaged commodities. Most of the states already have adopted the new regulation. If extended universally it would insure that a label acceptable in one state would be acceptable in any other state.

Mimeographed copies of the new Model Regulation may be obtained upon request to the Office of Weights & Measures, National Bureau of Standards, Washington, D.C.

NOW!

The WORLD Automatic Cellulose **BANDING** **MACHINE**



How it works — The cellulose banding material, in roll form is fed into position over the container, then cut to precise length. The container is indexed by starwheel feed. The band is opened by combined mechanical and vacuum action and transferred from a plunger over the bottle neck and cap. Operation is fully automatic. Quick changeover to other sizes of bands and bottles is readily effected.

What it does — J. C. Miller, Plant Manager of Miracle Power Division, The AP Parts Corporation writes: "In the



first eight months of operation our World Automatic Cellulose Banding Machine applied bands to 940,488 eight ounce Boston round bottles with 25mm caps, at a speed of 65 per minute.

"Before placing this machine in operation we had four to five people installing the bands by hand. High cost and fluctuating production made this operation so unsuccessful we were seriously considering changing to some other type of seal. Now, with this banding machine, our cost has been greatly reduced and we are very well satisfied with the performance and accuracy of the machine."

for high production, uniform quality, low cost application of cellulose bands to glass containers of the shapes and sizes normally handled by automatic cappers, fillers and World Labelers.

One more slow, costly, laborious hand operation is now eliminated. Banding is done at packaging line speeds. World Banders are available for 75, 150 or 225 containers per minute.

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GREENWICH, CONNECTICUT

Beer cools in the case

A polyethylene film waterproof case liner for standard cases of one-way, no-deposit bottles or cans of beer, introduced by the Iroquois



Beverage Corp., Buffalo, N.Y., makes it possible to load the case with ice, then transport it or use it at home, and on picnics and outings without fear of leakage or without using valuable refrigerator space, the company reports.

Promoted under the trade name "Cool-a-Case," this exclusive new package was introduced with an in-

tensive advertising and merchandising campaign in newspapers, radio and television. Bus fronts in Buffalo and vicinity as well as the brewery's truck fleet carried the announcement message.

The waterproof bag lining is placed inside the beer case. Ice can be piled in the case, directly on the bottles, to cool the beer. The Iroquois company supplies the case liners without extra charge to anyone. A special four-page folder, die cut to accommodate a free can opener and containing instructions for use, is included inside each Cool-a-Case. The folder lists also many of the ice suppliers located in Buffalo and on main routes to parks and picnic spots. A banner across the side of the case calls attention to the new feature, with sell copy stating, "Just add ice . . . Then serve cold. Iroquois Cool-a-Case with Special Waterproof Liner."

NAPA report on the containers market

Active retail trade is reflected in the strong demand for folding cartons and, with prices steady and competition active, delivery schedules have been lengthened, according to a report by the Containers Committee of the National Assn. of Purchasing Agents prepared under the supervision of Chairman Lee R. Forker, general purchasing agent for the Quaker State Oil Refining Corp. New styles and designs of folding cartons are geared to self-selling of products in the fast-growing volume of supermarkets.

There appears to be little need to expand inventories of corrugated paper boxes and no delay is reported on delivery of solid fibreboard containers. Advance scheduling is not required for multiwall bags and while no price change is expected, some suppliers have announced a bag-printing price change for September.

While steel packaging continues to absorb about 8% of all steel produced, according to the NAPA report, the trend of metal-can demand per capita continues to grow, reflecting increased consumer acceptance of small-sized cans. Adequate supplies of tin and blackplate are assured for the rest of this year. Tin prices have declined sharply, but contract can prices remain unchanged. Can producers are cur-

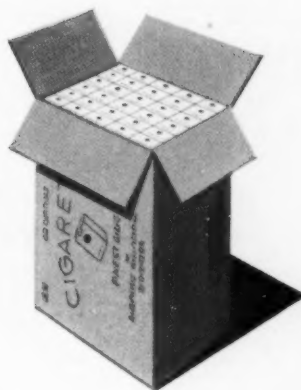
rently operating close to capacity. The report indicates that can prices may change about Nov. 1. Standardization by size is actively under consideration by many can buyers in an effort to reduce costs. Drums, pails and collapsible tubes are in good supply. Special dairy metal containers are reported tight.

Textile-bag supply is reported very good. A reduction in burlap-bag costs is predicted and caution is advised in purchasing textile bags.

Polyethylene demand is in excess of production, but increased capacity has improved deliveries. Cellophane, acetate and vinyl are in adequate supply. Known requirements should be scheduled in advance and reasonable working inventories are suggested for plastics. No major price change is predicted.

High-volume production is reported for jars, beverage and milk bottles, with demand in excess of supply in some areas. On the other hand, a reported complete plant shutdown for lack of volume emphasizes the trend toward local deliveries to minimize freight costs. Considerable resistance to high glass costs is apparent and reports stress the advantages of negotiation for lower prices under current competitive conditions.

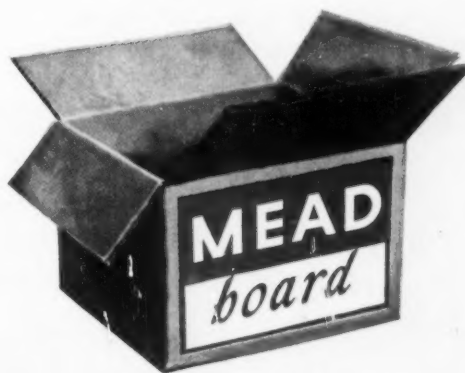
**Where there's smoke
there's fiber**



Between 1940 and 1951 the production of cigarettes in this country increased from 217.6 billion to 440.4 billion. This increase of more than 102 per cent would have been a healthy growth for any industry, but for the cigarette business, in which many millions of dollars had been spent prior to 1940 to develop the market, it was little short of phenomenal.

This growth not only amazes us, it pleases us. For almost without exception, cigarette cartons are packed for shipment in corrugated containers. A fair share of these are fabricated by converters who use MEAD .009 Corrugating Medium, made of chestnut and other hardwood fibers, combined with MEAD Kraft Liner. The result is a product that has strength and rigidity and is easy on shipping costs.

Where there's smoke—cigarette smoke, at least—there's fiber.



Mead Board is sold direct by

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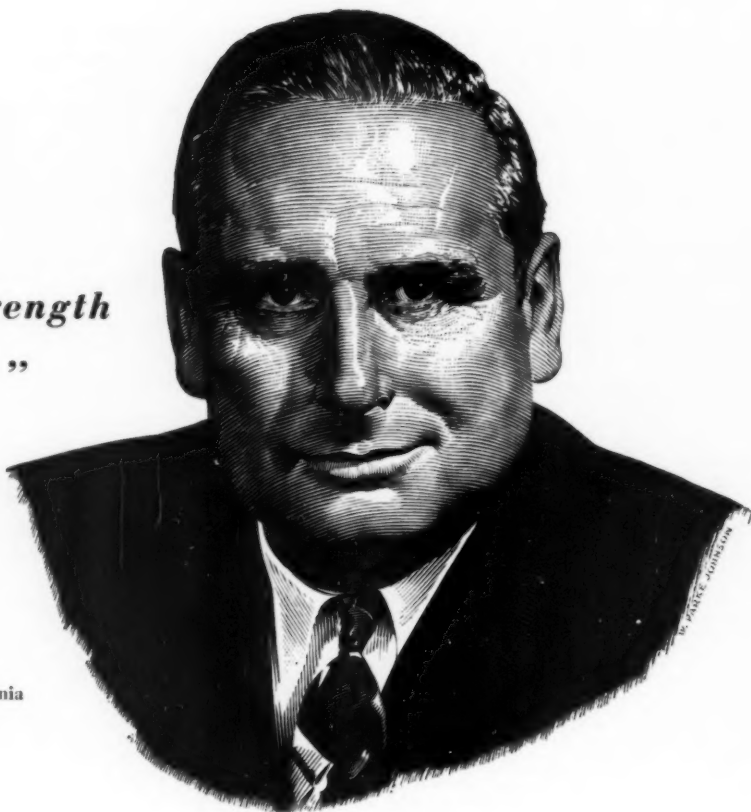
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Every pay day, 6,500,000 employed men and women . . . "are contributing to our national integrity and to the tradition of personal independence . . ." by the systematic purchase of United States Defense Bonds.

How important is this contribution to national economy and personal security? Let's look at a few figures.

- the cumulative purchases of 6,500,000 Payroll Savers add up to \$130,000,000 per month.
- the number of individual E Bonds sold in 1951 totaled 68,069,000 pieces—8% more than in 1950.
- purchases of \$25 and \$50 E Bonds—the denominations popular with Payroll Savers—were greater than the sales of \$500 and \$1,000 E Bonds.

- monthly redemptions of unmatured E Bonds during each of 9 months (April to December, 1951) were less than 1% of the amounts outstanding.

- the cash value of Series E Bonds held by individuals on December 31, 1951, amounted to \$34,727,000,000—\$4.8 billions more than the cash value of Series E's outstanding in August, 1945.

That Americans have built personal security and a reservoir of purchasing power exceeding \$34.7 billions is due in no small measure to the patriotism and foresight of men like Mr. Taylor and other leaders of industry who have made the Payroll Savings Plan available to their employees.

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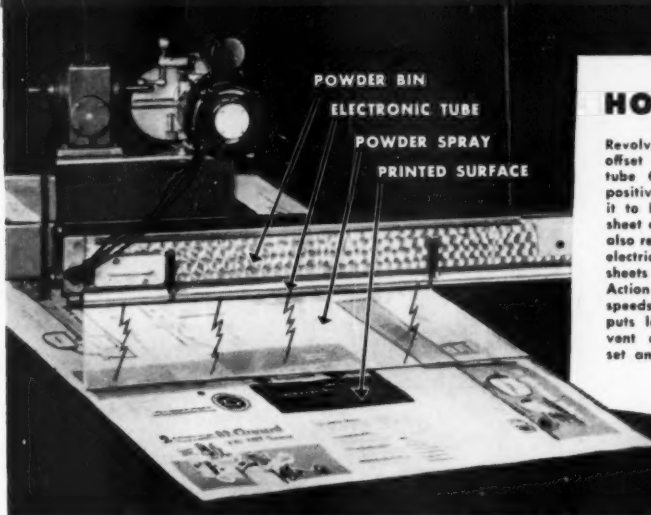
MODERN PACKAGING



OXY-DRY

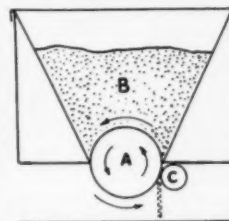
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OFFSET PREVENTION METHOD**

**INCREASES IMPRESSIONS PER HOUR
FROM ALL PRESSES—ALL PROCESSES**



HOW OXY-DRY OPERATES

Revolving shaft A distributes anti-offset powder B past electronic tube C which gives 10,000 volt positive charge to powder causing it to bond instantly across entire sheet as it is delivered. This action also reduces negative charge (static electricity) in paper which frees sheets from sticking and jamming. Action of ozone emitted from tube speeds oxidation of ink, powder puts legs between sheets to prevent offset and permits inks to set and dry thoroughly.



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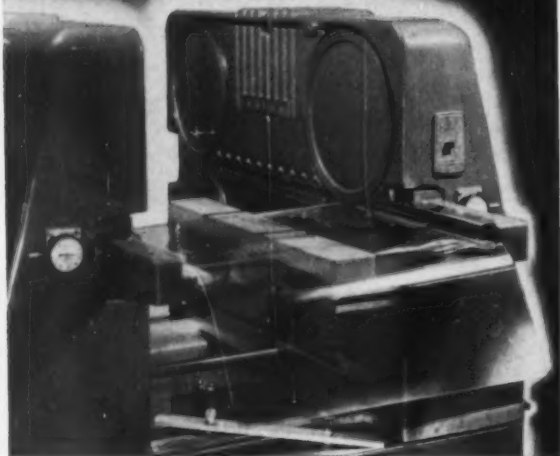
NEW

OXY-DRY rollers are now furnished with positive powder control etched surface. Eliminates "down-time" for costly labor time sanding, permits operation of sprayer for far longer time without service of any kind except to refill with OXY-DRY powder...one of a parade of improvements you can expect only from OXY-DRY research and development.

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• FAST • CONTINUOUS
DOUBLE-EDGE BEADING
OF SHEET PLASTIC!



Model-144 THERMOBEADER Duplex

Adjustable for handling sheet plastic rolls, strips or blanks 2" to 20" wide, the Thermobeader Duplex simultaneously beads *two* parallel edges at high speed. Dual heads can ALSO be used *independently* for single edge beading which gives you the same capacity as TWO single edge bead-ers. Substantially reduces production costs!

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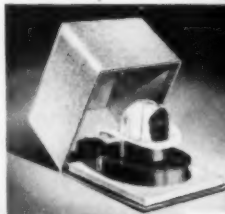
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SULT ON ANY PACK-
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The Quality and Character
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*"Claremont
Flock's
Lush
as
Plush"*



CLAREMONT FLOCK-TO-PACKAGE
Available through paper merchants in ready-to-use paper or board-backed form. Ideal for glamour packages, gift boxes and window curtains. Surface lends to printing or stamping. Handles perfectly. Economical heavy. Photo, courtesy of "Presentation," a division of Walter J. Gallagher Adv., N. Y. 10

CLAREMONT FLOCK for Package and Product
Claremont supplies its Flock (cotton, rayon or wool) to paper converters and manufacturers in a rainbow of colors ranging from brilliant hues to pastel tints. In the hands of imaginative designers, Flock serves as a magic carpet with which to create a new, highly saleable package and product allure. Color cards, samples and details available upon inquiry.



CLAREMONT FLOCK-TO-PRODUCT
Supplied in bulk to spec. Sprayed to adhesive-prepared surfaces. Creates suede-like, plush topping with full "3D" values. Durable. Eye-appealing. Pictured here as applied to turntable component of the Sonomatic "Coast" a portable, 3 speed, ultra-record playing phonograph. Photo courtesy Sonac Industries, Inc., Long Island, N. Y.

CLAREMONT WASTE MANUFACTURING CO.
The Country's Largest Manufacturer of Flock
CLAREMONT NEW HAMPSHIRE

Squeeze-bottle filling

(This article continued from page 119) placing stops on the grippers to limit pressure.

Packing operations for both of Mennen's products are quite similar. A team of girls, five for the spray container and eight for the Baby Magic, set up display containers, load bottles, insert divider nests. A single operator on both lines closes containers and passes them on to an automatic case sealer. Fewer packers are required for the deodorant line because bottles are loaded in units of a dozen, while half-dozen units are handled by Baby Magic.

CREDITS: Colgate—Polyethylene bottles, capillary tubes and plugs, Plax Corp., Box 1019, Hartford, Conn. Filler, MRM Co., Inc., 191 Berry St., Brooklyn 11. Tube-plug assembler, Standard-Knapp, 127 Main St., Portland, Conn. Capper and coder, Resina Automatic Machinery Co., Inc., 572 Smith St., Brooklyn 31. White urea caps, Armstrong Cork Co., Liberty St., Lancaster, Pa. Mennen—Polyethylene bottles and plugs, Plax Corp. and Injection Molding Co., 3823 Independence Ave., Kansas City 1, Mo. Capillary tubes, Irvington Varnish & Insulator Co., 6 Argyle Ter., Irvington 11, N. J. Filler, The Karl Kiefer Machine Co., 919 Martin St., Cincinnati 2, Ohio. Tube-plug assembler, Standard-Knapp. Automatic plugger (for Baby Magic) and capper for both products, Consolidated Packaging Machinery Corp., 1400 West Ave., Buffalo 13, N. Y. White urea caps, Armstrong Cork and Owens-Illinois Glass Co., Toledo 1, Ohio.

Canned whole milk

(This article continued from page 131) tamination is eliminated during filling and sealing operations.

Entering the canning unit, the cans are filled under vacuum in a sterile atmosphere. Covers, sterilized in the same manner, are automatically placed on the cans and sealed under vacuum. As the sealed cans emerge from the machine, they are rinsed and cooled by water sprays, check weighed and stored for casing and shipment.

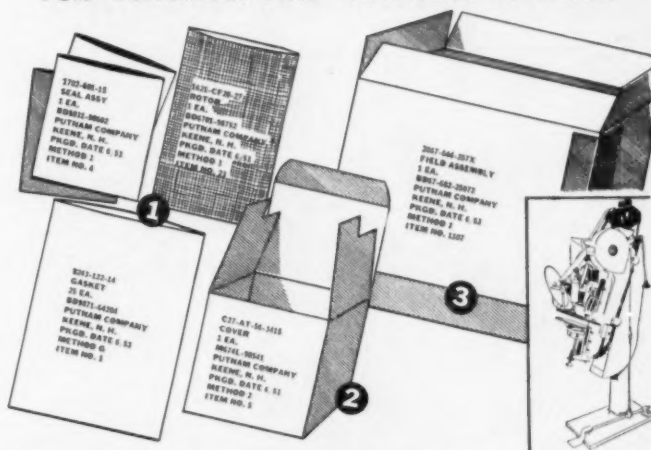
The two aseptic canning units at the new Ridgeland, Wis., plant each can turn out 100 six-ounce cans of Med-o-Milk per minute. The plant is capable of producing 200,000 cases of the product, in assorted sizes, per month.

At least two other organizations have developed their own techniques

MARKEM

SOLVED THIS MARKING PROBLEM

IDENTIFICATION MARKING FOR CONTRACT AND OVERSEAS PACKING



In contract and export packing of parts, assemblies, etc., certain JAN specifications call for three packaging stages: (1) enclosure in scrim-back or polyethylene lined heat sealing envelope, (2) intermediate packing in a folding box, (3) final packing in corrugated carton. Each of these three types of containers must be marked for instant and permanent identification. Many manufacturers, dissatisfied with conventional marking with crayon, stencil, labeling or other form of hand stamping, have not only found great savings in time and money, but also obtained more legible, longer lasting identification using a Markem Method. One Markem machine (with appropriate Markem type and Markem ink) prints desired information on all three containers. The vapor barrier of the envelope is not broken. Desired information is changed rapidly. By printing quantities of containers as and when needed, inventory problems are minimized. In this way, the Markem Method insures positive identification when the items reach their destination.

MARKEM

MARKS THEM ALL



CAN MARKEM HELP YOU?

Identification printing for contract and overseas packaging is but an example of how Markem solves industry's marking problems. Markem has been providing industry with production techniques and equipment to identify, decorate or designate its products, parts and packages since 1911. Markem also provides technically trained men who are available in your area to assure continued satisfaction with Markem methods and equipment.

When you have a marking problem, tell us about it and send a sample of the item to be marked. Perhaps a complete Markem Method has already been developed to solve your problem. If not, Markem will work out a practical solution.

Markem Machine Company, Keene 1, N. H., U.S.A.

MARKEM

... TO MAKE YOUR MARK

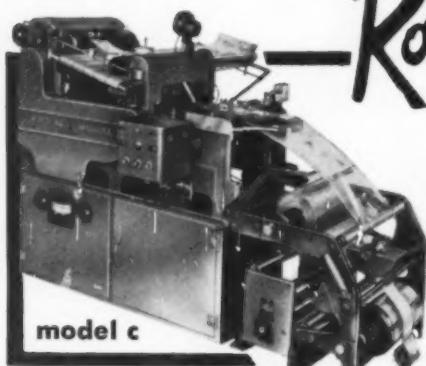
**"Roto Airtight Bags
Guarantee
Moisture-Proof Protection!"**



For perfect product protection, particular packagers prefer the machine that produces completely airtight premium cellophane bags — the versatile Roto Model C. Each seam is double sealed by heat and glue insuring complete moisture-proof protection!

PLUS — Very high speed production (up to 150 bags per minute) of consistently superb bags. You saw it operate at the packaging show.

PLUS — a big bonus! Using no special attachments or elaborate conversion preparation the Model C offers the same high production rates on polyethylene coated cellophane along with the necessary airtight protection. Heat and glue again prove to be the answer!



Roto Bag

**CELLOPHANE
BAGMAKER**

FOR EASY OPENING BAGS
A THUMB-NOTCH ATTACH-
MENT IS NOW AVAILABLE

ROTO BAG MACHINE CORPORATION
130 East 13th Street, New York 3, N. Y.

for canning whole fresh milk and are now market testing the product. These include Winger Dairy Products Processing & Mfg. Corp., Denver, whose Winger Milk is being sales tested in Denver, Minneapolis, St. Paul and parts of California, Texas and West Virginia, and the Canlac Corp., New Orleans, whose Sterolac canned whole milk is also offered in a chocolate-flavored variety. Initial distribution of Sterolac was in Columbia, S. C. This product was developed at Tulane University and at Brown's Velvet Dairy, New Orleans, whose manager, Albert W. Brown, is Canlac president.

Golden State Co., Ltd., San Francisco, a major West Coast dairy, has been producing a similar product in limited quantities for tests in Alaska, Guam and other areas, but has announced no plans for possible domestic distribution.

CREDITS: Cans, Continental Can Co., 100 E. 42 St., New York 17. Corrugated shipping containers, Container Corp. of America, 38 S. Dearborn St., Chicago 3, and National Container Corp. of Illinois, 6840 W. 66 Pl., Chicago.

Salad by machine

(This article continued from page 109) in position and the conveyor guides are narrowed.

One operator supervises the operation of the filling machine, keeping it supplied with containers and lids, while a second operator packs the finished packages one dozen to a corrugated shipping container. For mechanical protection, the individual cups are separated into two layers by a sheet of corrugated board. Containers are sealed with gummed tape so they can be easily opened and re-used. An interesting feature of the boxes is the use of two die-cut slots in the side walls which expedite refrigeration of the inner packages. The salads are produced and packaged at regular room temperatures, but immediately transferred to a holding cooler. Here they remain until ready for distribution to retail stores in National's refrigerated trucks.

CREDITS: Model DIA Triangle-Bagby filling machine, Triangle Package Machinery Co., 6633 W. Diversey Ave., Chicago 35. Paper containers and lids, Lily-Tulip Cup Corp., 122 E. 42 St., New York 17, and Continental Can Co., Inc., Paper Container Div., 110 E. 42 St., New York 17. Corrugated shipping cases, Hankins Container Co., 3044 W. 106 St., Cleveland 11.



This container was used very successfully for many years to package a popular brand of peanut butter. Because of its shape, however, it was hard to stack.

The packer knew the importance of the stacking feature in today's supermarket selling. And, to get it, he decided on a design change in the package that had become so familiar to customers over the years. He turned over to Armstrong the problem of building into his package the stacking feature it lacked.



This smart, new jar stacks beautifully because of a raised glass ring on the base that matches a depressed ring on the cap.

In the course of designing it, two important savings were also built into the design. First, the tapered sides were straightened. This gave better label visibility. But it also offered the economy of a smaller cap. Then it was found the over-all weight could be reduced. So the packer wound up with a jar that not only stacked well but gave unexpected savings, too.

Sharply reduced costs

resulted from the re-designing of this container. The design change that was made wasn't so big as some. But it was important. And it's paying off for the packer every day in lower costs.

What about your container? Could a change in design give it extra sales appeal—or help it perform better on your filling lines?

Let our designers help you answer questions like these. Often, even the smallest design change can make a great difference in production costs. For details, call your near-by Armstrong office or write Armstrong Cork Company, Glass and Closure Division, 5409 Crystal Street, Lancaster, Penna.



**ARMSTRONG'S
GLASS CONTAINERS**

CLASSIFIED ADVERTISEMENTS

Modern Packaging reserves the right to accept, reject or censor classified copy.

EMPLOYMENT • BUSINESS OPPORTUNITIES • EQUIPMENT (used or resale only)

MACHINERY FOR SALE

FOR SALE: 2-Brightwood Box Machines, with collapser; Std. Knapp Self-Adjusting Glue Sealer & Comp. Unit; Pneumatic Seal Packaging Line, late type; Capem SIF Capper; 7-Vacuum & Gravity Fillers, S/S fitted; Stokes & Colton Auto. Tube Fillers & Closers. Only a partial list. Send us your inquiries. Consolidated Products Co. Inc., 16-20 Park Row, N. Y. 38. Barclay 7-0600.

PONY LABELRITES: Factory rebuilt, one year "new machine" guarantee. New Jersey Machine Corporation, 16th Street & Willow Avenue, Hoboken, New Jersey.

PRICED FOR QUICK SALE: Large type Pneumatic Packaging Machines, including Top carton sealer, Bottom sealer, Filler-Weigh machine. Fifteen years old. Actual use of machines: 5 years. In excellent operating condition. Adjustable to different size boxes. Address: General Products, P. O. Box 448, Council Bluffs, Iowa. (Tele: 3-1311).

AT BARGAIN PRICES

International S. S. Straightline Vacuum Filler, Resina LC and S automatic Cappers. Oliver Model 799E automatic cellophane Wrapper. Stokes and Smith Transwrap Fillers. Stokes & Smith GI and HG88 Auger Powder Fillers. Triangle Elec-Tri-Pak G2C, A6CA Fillers. Filler 4-Head and Hope 6-Head S. S. Fillers. Knapp 429 and Coco Carton Closers. Pony MI and M Labelrites. Ceco, Redington and R. A. Jones Cartoning Units. Package Machinery Co. DF and FA Wrappers. Hayssen 3-7, 7-11, 11-18 Automatic Cellophane Wrappers. Burt adjustable Wraparound Labeler. Hudson Sharp Campbell Auto. Cellophane Wrapper. This is only a partial list. Tell us your requirements.

Union Standard Equipment Company
318-322 Lafayette Street
New York 12, N. Y.

FOR SALE: Reconditioned 6 line Geyer Jelly, jam and preserve filling machine complete with separate motor driven agitator, variable speed drive and automatic feed. Excellent condition. Capacity 6 oz. to #10 tins. Box 597, Modern Packaging.

GRAYURE PACKAGING PRESS: 5 unit specialty press, 2 years old. One reversible unit. 36" maximum printed width, 17" to 34" repeats. Complete with rewind, sheeter, laydown machine, cylinders and cylinder trucks. Also two Christensen saddle stitchers, 6 feeder stations, 4 heads, 2 extra heads, in excellent condition. Heeneberry Rotogravure Co., 4001 N. Ravenswood, Chicago 13, Illinois. Lakeview 5-8520.

OLIVER TOP LABELER AND IMPRINTER: Latest model complete with Logo holders and bench. Used only 3 months. Box 606, Modern Packaging.

TWO (2) TRIANGLE AUGER-PAK FILLING MACHINES: Model U-1, Nos: 6511 & 6512, with all improvements, excellent condition, \$300.00 each. T. K. Smith, Scrutan Company, 290 Jelliff Ave., Newark, N. J. Bigelow 8-1005.

FOR SALE

4—Peters Automatic Carton & Liner Feeding machines, Type AC, speed 60 per minute; 4—Peters Carton Forming machines, Type ACE, speed 60 per minute; 1—Peters Carton Folding & Closing machine, Type DWY, speed 60 per minute; 1—Hayssen Carton Wrapping machine, Model 711, speed 35 per minute.

Grocery Store Products Co.
Libertyville, Illinois

FOR SALE: Ruf Cellophane slitter 26" completely equipped, practically new. Reasonable price. Also Model I Simplex cellophane bag machine. Good working condition. Cheap. Peninsular Package Products, Inc., 3745 N. W. 50th Street, Miami, Fla.

1 PNEUMATIC SCALE: 60 a minute Cartoning Line Bottom and Top Sealers with 18" compression Unit. Davis Supply Company, 2134 So. Saginaw Street, Flint, Michigan.

FOR SALE: "Oliver" Model "M" Wrapping Machine. Used. \$1,150.00. Doughboy DBL Conveyor 8' 0". Practically new. \$400.00. Two U. S. Stacker Slicers. Used. \$500.00 for the pair. 4 1/4 x 4 1/4 flat Paprus cardboard. 25 cases at 6.500 per case @ \$2.30 per thousand. Act fast. Nilon Brothers, Box 719, Aiken, South Carolina.

OPPORTUNITY: 5 Complete packaging lines priced to sell. Peters Automatic Feeders and Carton Formers. Peters Closers and Package Machinery F-5 Wrapping Machines. Can be seen in operation during September. C. F. Mueller Co., Jersey City, New Jersey. Call Mr. Seller, Journal Square 2-3800.

EQUIPMENT WANTED

WANTED: Cameron Slitter, Packaging Line, Labeler, Capper, and Mixer. Box 595, Modern Packaging.

WANTED: Beck Sheeter, CCHS-5, 40" or larger for cutting cellophane and unsupported materials. Advise specifications and best cash price. Box 598, Modern Packaging.

WANTED: New or used automatic machine for making various sizes acetate card cases and convention badge holders. Also, two used Taber Thermofolders. Box 605, Modern Packaging.

WANTED: Cartoning Machine to handle item 2 1/4" x 3 1/2" x 7 1/2" high either semi or fully automatic. Box 614, Modern Packaging.

HELP WANTED

SALES REPRESENTATIVES: Leading manufacturer of polyethylene film requires additional sales representative in many territories. Commission basis. Must have knowledge of packaging industry. Send complete resume of experience, education, age, photo, present lines and area covered. Attention: Director of Film Sales. Box 596, Modern Packaging.

SALES REPRESENTATIVES: Established Specialty Bag Manufacturer has territories open for producers who can sell a quality product on a straight commission basis. Closest cooperation will be given to man selected. Give complete resume in first letter. Box 601, Modern Packaging.

REPRESENTATION WANTED: Plastic plant, rapidly expanding in molded packaging, desires exclusive representation in protected territories. Box 602, Modern Packaging.

SALES REPRESENTATIVES: National Converter of flexible packaging materials has two important sales opportunities open in New York and New England. Successful, creative and sales experience in packaging or allied fields essential. Qualified applicants will be given specialized training at home office. Amount of draw, against commission, will be based on your qualifications. Box 618, Modern Packaging.

CHEMICAL ENGINEER: With experience in lamination and coatings of all types films, paper and foil with full knowledge of related adhesives, lacquers and dyes. Immediate opening for qualified man. Well established firm in converting field for 50 years—location southeast—furnish full details in your reply to this magazine. Box 619, Modern Packaging.

SALES REPRESENTATIVE

If you are experienced in developing sales and uses for specialty bags, we have a few open territories.

American Bag & Paper Corp.
Water & South Sts.
Philadelphia, Pa.

REPRESENTATIVE WANTED: Outstanding New York representative wanted by transparent box manufacturer. We have national accounts, are young, growing, have large plant; do our own printing and die making; offer lowest prices and finest production. We prefer somebody who will handle our line exclusively, but will also consider replies from salesmen in packaging field who wish to sell transparent boxes with kindred lines. Box 604, Modern Packaging.

REPRESENTATIVES WANTED: Young and progressive organization with complete converting facilities for Cellophane, Polyethylene and Film looking for live wire representation. Side-line men acceptable. Many territories open. Liberal commissions paid. Reply in strict confidence giving business background. Box 603, Modern Packaging.

WANTED: An alert contact man to sell expensive and medium priced custom made specialty boxes made of velvet, plastic and velours. Must have a following. Commission only. Box 613, Modern Packaging.

MINNESOTA MINING has an opening in Packaging Engineering for a young mechanical or industrial engineer graduate. Experience or training in package design, materials and methods desirable. All replies in strict confidence. Send complete resume to Director of Technical Employment.

Minnesota Mining & Mfg. Co.
411 Piquette
Detroit 2, Mich.

SITUATIONS WANTED

DETROIT AND EASTERN MICHIGAN: Manufacturer's agent seeks additional packaging or sales promotional material line. Thorough knowledge of territory and excellent contacts proven by present large sales volume. Commission arrangement only. Results assured. Box 600, Modern Packaging.

ARTIST LETTERER: (N.Y.C.) Designs, layouts. Now holding responsible position. Long general experience on national accounts, tobacco, food, liquor labels, boxes, seals, decals, display cards. . . . Color sketches. B & W line separation drawings for letterpress. Good clean work—conscientious—accurate. Desires change, modern art dept. Box 607, Modern Packaging.

(Continued on page 223)

MODERN PACKAGING

Packaging sells apple

Sales varied from 10.8 to 34.1 lbs. of apples per 100 customers depending upon the display and packaging methods used in a test in Central New York chain stores in which the apple purchases of 78,178 customers were observed, according to Lloyd E. Partain, sales manager and farm market director of *Country Gentleman*.

Mr. Partain, speaking to members of the International Apple Assn. in Chicago recently, reported that 65 to 75% of all apples sold at retail this past season were pre-packaged. Advising leaders in the apple business to study closely their packaging problem, Mr. Partain said that only by having their product packaged right can they hope to reach their sales objectives.

In another test, he said, Cornell University marketing specialists observed nearly 200,000 customers. These tests showed that pre-packaged apples sold better than bulk, that the 6-lb. pre-packaged unit sold best, that customers want to see what they are buying, hence film bags proved the most successful containers, with polyethylene bags favored by the majority.

Washington reports

Taking cognizance of rumors in the field that the Department of Commerce Containers and Packaging Division, recently a division of the National Packaging Authority, might be abolished in connection with the current dissolution of the NPA, Assistant Secretary of Commerce Craig R. Shaeffer has advised MODERN PACKAGING that no such abandonment of the packaging field is being considered.

Future plans and policies of the Department's successor agency to the National Production Authority, Mr. Shaeffer declares, will include a representation of the packaging field "through the focal point of a Containers and Packaging Division."

In line with the Department's policy to become more active in the promotion and development of domestic and foreign commerce, Mr. Shaeffer states, "such services as the *Containers and Packaging Industry Report*"—the quarterly publication containing statistics on package production—"will become a major program of the Containers Division." The responsibility of publishing this industry report, he says, will be continued by the present staff.

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EXACT
SPECIFICATIONS**

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for QUOTATIONS on
YOUR REQUIREMENTS



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ADHESIVES

"Truly Master Products" for easy application and sure bonding of

● ● ● For more than forty years, Rubber and Asbestos Corporation has been developing and manufacturing adhesives which are outstanding in quality and performance. Leading laminators look to Bondmaster stock formulations for their routine production, and to our laboratory for new adhesives to meet new problems. May we send you technical data on Bondmaster Adhesives for your applications?

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ACETATE





At your age!

If you are over 21 (or under 101) it's none too soon for you to follow the example of our hero, Ed Parmalee, and face the life-saving facts about cancer as presented in our new film "Man Alive!". You'll learn, too, that cancer is not unlike serious engine trouble—it usually gives you a warning:

(1) any sore that does not heal (2) a lump or thickening, in the breast or elsewhere (3) unusual bleeding or discharge (4) any change in a wart or mole (5) persistent indigestion or difficulty in swallowing (6) persistent hoarseness or cough (7) any change in normal bowel habits.

While these may not *always* mean cancer, any one of them should mean a visit to your doctor.

Most cancers are curable but *only* if treated in time!

You and Ed will also learn that until science finds a cure for *all* cancers your best "insurance" is a thorough health examination every year, no matter how well you may feel—twice a year if you are a man over 45 or a woman over 35.

For information on where you can see this film, call us or write to "Cancer" in care of your local Post Office.

American Cancer Society

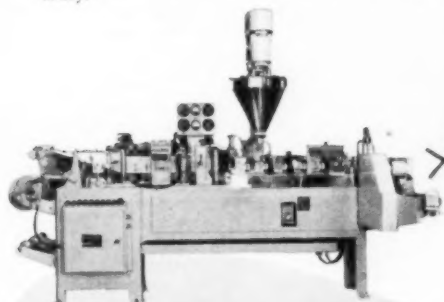


MAN ALIVE! is the story of Ed Parmalee, whose fear weakens his judgment. He uses denial, sarcasm and anger in a delightful fashion to avoid having his car properly serviced and to avoid going to a doctor to have a symptom checked that may mean cancer. He finally learns what a difference it makes (in his peace of mind and in his disposition) to know how he can best guard himself and his family against death from cancer.

Packaging Problems?

BARTELT CAN HELP!

Colorful, individual packages which effectively display your product can be made automatically and economically on Bartelt Packaging Machines. Bartelt Packages *make the bag* from a roll of paper, film, or foil; *fill* by count, volume, or special feeder; and *heat seal* accurately and safely. If you can use a pouch style, heat-sealed package, our machines may be adaptable to your needs. Send us your packaging problem today.



BARTELT ENGINEERING CO.
1900 HARRISON AVENUE
ROCKFORD, ILLINOIS



*"Machinery for
Creative Packaging"*



(Continued from page 220)

SITUATION WANTED: Young executive, energetic, resourceful, adaptable and fully experienced in point of sale merchandising, paper converting and coating, flexible packaging, Government specification packaging materials, and plastic film combinations desires position of opportunity in sales promotion, technical sales or new product development with well-established manufacturer. Box 608, Modern Packaging.

HOG-TIED DEVELOPMENT EXECUTIVE DESIRES: Free-or hand to develop and sell ideas—Packages, materials, forming equipment, converting processes. Personal patents vacuum and liquid packaging issued and pending. Experienced major converters waxed and coated papers, films, foils, cartons. Salary plus basis, progressive converter, preferably South. Box 609, Modern Packaging.

SITUATION WANTED: Man age 45, with years of experience in production, management, packaging, packaging films, automatic packaging machinery and plant layout. Also has knowledge of production and packaging problems pertaining to bakeries, candies, vegetables and other allied products. Desires position with reliable firm. Will relocate if necessary. Complete resume on request. Box 615, Modern Packaging.

PLANT SUPERINTENDENT: Experienced with leading converters of Flexible Packaging. Bag Machines, pre-printing and Tail-end Presses. All printing processes. Knowledge of heat-sealing, waxing, die cutting and many other attachments. All around background; package development, quality control, labor relations, production planning. Will consider position as Plant Manager, Sales Service representative or Consultant. Preference New York City vicinity but will relocate. Box 611, Modern Packaging.

FOOD PACKAGING PLANT FOREMAN: College graduate seeks opportunity with active organization. Six years experience in the processing, manufacturing, filling and packaging of dry food products. Set up trial and long run production lines for automatic and semi-automatic operations. Presently employed. Complete resume on request. Box 617, Modern Packaging.

PACKAGING ENGINEER: College graduate desires position as packaging engineer with company manufacturing delicate or fragile products. Thoroughly familiar with current packaging methods and materials. Proven ability in design of effective cost reduction packs. Well rounded engineering background, experienced in purchasing, correspondence, industrial processes, Government specifications, and general fields related to packaging. Top references and complete resume on request. Box 616, Modern Packaging.

MISCELLANEOUS

PLASTIC SCRAP AND REJECTS IN ANY FORM: Cellulose Acetate, Butyrate, Polystyrene, Vinyl, Polyethylene, etc. We pay top prices for clear, colored and printed scrap in any quality. Box 594, Modern Packaging.

DESIRE TO PURCHASE

Paper Converting or Rotary Printing Business. Interested in going business with good plant, equipment and personnel. Will deal with principals only.

Box 599, Modern Packaging

ITALIAN paper manufacturers and converters manufacturing packaging paper, corrugated cartons and boxes desire association with people with capital to improve equipment and expand capacity. Would also consider sale assisting buyer during period after purchase. Write to: Luciano Grando, Via Cimara 23, Milano (Italy)

FOR SALE: Flexible Packaging Plant, including building plus extra land for expansion, for converting of Cellophane, Polyethylene and Papers into bags, printed rolls, etc. Can be purchased without real estate. Located in Metropolitan New York. Box 610, Modern Packaging.

CYLINDER MACHINE MILL IN MIDDLE WEST: interested in making close connection or working arrangement with converter who uses at present, or could use, cylinder machine products. Box 612, Modern Packaging.

WANTED: Polyethylene and vinyl scrap, any type. Also Polyethylene virgin resin. American Vinyl Corp., 38-01 23rd Ave., Long Island City 5, N. Y. ASTORIA 4-1768.

All classified advertisements payable in advance of publication
Closing date: 10th of preceding month; e.g., September 10 for October issue

Up to 60 words\$10.00	Up to 120 words\$20.00	Up to 180 words\$30.00
Up to 60 words (boxed) \$20.00	Up to 120 words (boxed) \$40.00	Up to 180 words (boxed) \$60.00

For further information address Classified Advertising Department,
Modern Packaging, 575 Madison Avenue, N. Y. 22, N. Y.

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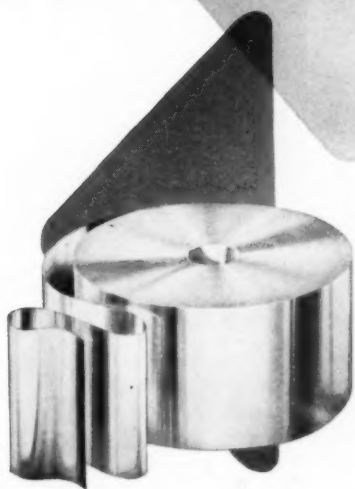
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to be guarded
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